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Medicare Beneficiary Program Data, 1988

U.S. Department of Health and Human Services
Health Care Financing Administration

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U.S. Department of Health and Human Services
Health Care Financing Administration
Baltimore, Maryland 21207

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I. Introduction

One of the principal goals of the Health Care Financing Administration (HCFA) is to promote the timely and optimum delivery of appropriate, cost-efficient, and high-quality health care to the 33.0 million (as of July 1, 1988) Medicare enrollees. HCFA must also insure that Medicare enrollees are aware of the services for which they are eligible, that those services are accessible, and that HCFA policies and actions promote efficiency and quality in the total health care delivery system.

In an effort to provide HCFA with the latest and most relevant program data available and to demonstrate the extent to which the above objectives are being met, the Office of Research and Demonstrations presents this report with emphasis on beneficiary cost-sharing and the use and cost of Medicare benefits.

Presented in the report are annual data on aged and disabled Medicare enrollees eligible for and using reimbursed Medicare-covered services during calendar year 1988. Trend data are presented for selected years 1967-88 and include national estimates of enrollment and utilization; charges and program payments; and beneficiary cost-sharing liability. To highlight the patterns of use and costs of Medicare benefits, the data are presented in terms of selected demographic variables, including urban and rural residence.

Particular emphasis has been placed on the beneficiary cost-sharing aspects of the Medicare program. Thus, the report represents the dual viewpoints of program administration and beneficiary participation.

Estimates for the same statistic may differ slightly from one table to another depending on the sources of the data, the update of the file, and the intended use of the data and the tables. The reader should refer to the Glossary for the definitions of terms and statistics.

The introduction consists of a synopsis of the Medicare program that includes:

- Covered services under the Medicare hospital insurance program
- Covered physician and outpatient services under the Medicare supplementary medical insurance program
- Types of services not covered by Medicare
- Present and estimated value of Medicare benefits and contributions: July 1, 1988 and 2010
- Life expectancy at age 65
- The ratio of supplementary medical insurance payments to premium income, and percent change: Fiscal years 1967-88

The Medicare program covers inpatient hospital care, some inpatient care in a skilled nursing facility, home care, hospice care, physician and other medical services. Most persons 65 years of age or over, disabled persons entitled to social security cash benefits for at least 24 months, and most persons with end stage renal disease are eligible for these benefits.

- Approximately 98 percent of the Nation's aged are enrolled in the HI program. On July 1, 1966, when Medicare became operational, 19.1 million aged persons were enrolled.
- By July 1, 1988, the number of enrollees had increased to 33.0 million; this total included 3.1 million disabled enrollees. (Medicare coverage of the disabled began on July 1, 1973.)

The Medicare program has two complementary but distinct parts: Hospital insurance (HI, also called Part A) and supplementary medical insurance (SMI, also called Part B). Medicare benefits and administrative expenses are paid from the two separate trust funds. The HI trust fund is financed primarily through a tax on current earnings from employment covered under the Social Security Act. The SMI trust fund is financed through premiums paid by or on behalf of persons enrolled in the program and from general revenues of the Federal Government.

The HI program covers 90 days of inpatient hospital care in a benefit period (spell of illness), which begins with the first day of hospitalization and ends when the beneficiary has not been an inpatient in a hospital or skilled nursing facility (SNF) for 60 consecutive days. There is no limit to the number of benefit periods an individual may use. The program also provides a nonrenewable (lifetime) reserve of 60 days if a beneficiary exhausts the 90 days available in a benefit period. In addition to inpatient hospital care, the HI program covers up to 100 post-hospital days in an SNF if the beneficiary is certified to require such care. The HI program also covers home health agency visits and hospice care services (Table 1).

The SMI program provides payments for physician services as well as related medical services and supplies ordered by physicians. SMI also covers outpatient hospital services, rural health clinic visits, home health agency visits for those enrollees who have SMI coverage only, and many other health services and supplier services that are not covered by Medicare HI (Table 2).

Table 1

Covered services under the Medicare hospital insurance program, by place of service

Type of covered service	Inpatient hospital	Skilled nursing facility	Home health agency	Hospice
Accommodations, semi-private, including special diets	x	x	-	x
Blood transfusions	x	x	-	x
Counseling	-	-	-	x
Dental services requiring hospitalization	x	-	-	-
Doctors' services	-	-	-	x
Drugs and biologicals	x	x	-	x
Durable medical equipment	x	x	x	x
Emergency services	x	-	-	-
Home health aides	-	-	x	-
Homemaker services	-	-	-	x
Intern and resident services, and teaching physicians in hospitals	x	x	x	-
Medical social services	x	x	x	x
Medical supplies and appliances	x	x	x	x
Nursing and related services, excluding private duty	x	x	-	x
Nursing, intermittent skilled nursing care	-	-	x	-
Occupational therapy	x	x	x	x
Other diagnostic or therapeutic services 1/	x	x	-	-
Outpatient services	-	x	x	
Physical therapy	x	x	x	x
Respite care and procedures necessary for pain control	-	-	-	x
Speech pathology	x	x	x	x
Whole blood and packed red blood cells	x	x	-	-

1/ Includes blood tests, x-rays, psychologist and physical therapy services, rehabilitative care, respiratory therapy, independent clinical laboratory services, and mental health services.

SOURCE: Health Care Financing Administration: Your Medicare Handbook, 1988.

Unlike HI, SMI requires a monthly premium payment, $24.80 per month as of January 1988. Under buy-in agreements, most State Medicaid programs pay these premiums for persons who qualify for both Medicaid and Medicare benefits.

About 96 percent of the total Medicare population is voluntarily enrolled in the SMI program. On July 1, 1988, the number of SMI enrollees totaled 31.6 million; of this total, about 0.6 million aged enrollees had SMI coverage only. On July 1, 1966, 17.7 million aged persons were enrolled in the SMI program.

Under the law, Medicare does not cover care that is not "reasonable and necessary" for the treatment of an illness or injury. Medicare also does not cover "custodial" care that is primarily needed for the purpose of meeting personal needs and that could be provided by persons without professional skills or training. In addition, some health care services that Medicare enrollees generally use, such as routine eye examinations and preventive services, are not covered by Medicare. Drugs and certain dental procedures are covered only if provided during an authorized hospital inpatient stay. A list of services that HI and SMI do not cover under the Medicare program are presented in Table 3.

Under Part B cost-sharing provisions, the beneficiary must pay (1) a monthly premium, (2) an annual Part B deductible, (3) a 20-percent coinsurance for physician and physician-related services, and (4) balance billing on unassigned claims for services rendered by physicians who have not agreed to accept the Medicare allowed charge as full payment. (See assignment and balance billing in the Glossary).

Table 2

Physician and outpatient services covered under the Medicare supplementary medical insurance program

Physician services	Outpatient services
Diagnostic tests and procedures	Ambulance transportation
Medical and surgical services, including anesthesia	Ambulatory surgical centers
Radiology and pathology services while a hospital inpatient or outpatient	Antigens and blood-clotting factors
Other services furnished in the doctor's office:	Blood transfusions, blood, and other components
- X-rays	Certified registered nurse anesthetist
- drugs and biological	Clinic services
- blood and blood components	Comprehensive outpatient rehabilitation facility
- medical supplies	Dialysis services
- physical therapy	Drugs and biological
- occupational therapy	Durable medical equipment
- speech pathology	Emergency room services
Chiropractic services (manual manipulation of the spine to correct subluxation)	Independent clinical laboratory
Dental services that involve surgery on the jaw or the setting of fractures	Laboratory tests billed by hospital
Optometrists, excluding routine eye examinations	Medical supplies
Podiatrist services, excluding routine foot care	Mental health services
Second opinion	Nurse-midwife
	Occupational therapy
	Physical therapy
	Physician assistant
	Portable diagnostic X-ray
	Prosthetic devices
	Psychologist services
	Rural health services
	Speech pathology
	Vaccines, hepatitis and pneumococcal
	X-rays and other radiology services billed by the hospital

SOURCE: Health Care Financing Administration: Your Medicare Handbook, 1988

The Omnibus Budget Reconciliation Act of 1981 (Public Law 97-35) raised the Part B deductible from $60 to $75, effective January 1, 1982. Until the deductible is met, the beneficiary is responsible for 100 percent of any allowed charges for physician and physician-related services. The program reimburses 80 percent of the allowed charge (after the beneficiary has met the annual deductible), and the beneficiary is responsible for the 20-percent coinsurance amount required by law. The beneficiary also may be liable for physician charges resulting from balance billing.

Medicare allowed charges frequently are lower than the physician's submitted charges. The Medicare beneficiary may save a substantial amount of money and avoid balance billing by choosing a Medicare-participating physician or a physician that takes Medicare assignment. For further information on Part B balance billing, see Section IV.

Most enrollees can expect to receive Medicare benefits over their life expectancy (Table 4) that will exceed their payroll tax and premium contributions.

Table 3
Services not covered by Medicare

This alphabetical list shows most of the major services/supplies not usually paid for by Medicare. However, some items (indicated by an asterisk) can be covered by Medicare under certain conditions.

Acupuncture
Chiropractic services*
Christian Science practitioners' services
Cosmetic surgery*
Custodial care

Dental care*
Drugs and medicines purchased by enrollee with or without a doctor's prescription*
Eyeglasses and eye examinations for prescribing, fitting, or changing eyeglasses*
Foot care that is routine*

Hearing aids and hearing examinations for prescribing, fitting, or changing hearing aids
Homemaker services*
Immunizations, except hepatitis and pneumococcal
Injections that can be self-administered, such as insulin

Long term care (nursing homes)
Meals delivered to enrollee's home
Naturopaths' services

Nursing care on full-time basis in home of enrollee
Orthopedic shoes unless they are part of a leg brace and are included in the orthopedist's charge

Personal convenience items requested by enrollee (a phone or television in a hospital room or skilled nursing facility)
Physical examinations that are routine (for example, yearly physical examinations) and tests directly related to such examinations

Private duty nurses
Private room*
Services performed by immediate relatives or members of enrollee's household
Services provided outside the United States*
Services that are not reasonable and necessary under Medicare program standards

Services payable by another government program

SOURCE: Health Care Financing Administration: The Medicare Handbook, 1989.

Table 4
Life expectancy in years at age 65 and average age at death

Year	Males		Females	
	In years	Age	In years	Age
1965	12.92	77.92	16.34	81.34
1980	14.04	79.04	18.36	83.36
1983	14.31	79.31	18.64	83.64
1984	14.31	79.31	18.66	83.66
1985	14.40	79.40	18.68	83.68
1986	14.79	79.79	18.69	83.69
1987	14.87	79.87	18.78	83.78
1988	14.94	79.94	18.88	83.88

SOURCE: Social Security Administration, Office of the Actuary.

Whether the beneficiary's earnings on which HI taxes were paid were low, average, or maximum, Medicare enrollees are getting a good return for their money under Medicare (Table 5). For HI enrollees 65 years of age, HCFA's Office of the Actuary (OACT) has developed estimates—as of July 1, 1988—that show:

- The ratio of the average expected HI lifetime benefits to accumulated lifetime HI taxes (based on average earnings on which HI taxes were paid) is 5 to 1; therefore, a Medicare HI enrollee could expect to receive $5 of HI benefits for every $1 of HI taxes paid over a lifetime.
- The ratio of HI benefits to HI taxes is the same (5 to 1) for both men and women; for a married couple, however, the ratio is estimated to be about 10 to 1.
- For beneficiaries with low earnings, the ratio of HI benefits to HI taxes is estimated to be about 10 to 1 men and 11 to 1 women; for a couple the ratio is estimated to be 22 to 1.

As of July 1, 2010, based on estimates prepared by the Office of the Actuary (OACT), Medicare enrollees still will be getting a bargain under Medicare, but not as good a bargain as in 1988.

- For HI enrollees 65 years of age in 2010, OACT estimates show that the ratio of the average expected HI lifetime benefits to accumulated lifetime HI taxes will be about 3 to 1 (based on average earnings on which HI taxes were paid).
- The ratio of HI benefits to HI taxes (based on average earnings on which HI taxes were paid) was the same (3 to 1) for both men and women; for a couple, the ratio is estimated at 5 to 1.
- For beneficiaries with low earnings, the ratio of HI benefits to HI taxes is projected to be about 6 to 1 for men, and 7 to 1 for women; for a couple, the estimated ratio was 13 to 1.

Table 5
Present or estimated value of Medicare hospital insurance benefits and contributions: July 1, 1988 and 2010

Earnings on which HI taxes were paid	Present value of accumulated HI contributions with interest from 1966*	Present value of expected HI benefits to be paid on behalf of persons age 65 in selected year**			Ratio of present value of expected HI benefits to present value of accumulated HI taxes***		
		Male	Female	Couple	Male	Female	Couple
Year 1988							
Low	$2,770	$28,750	$31,440	$60,190	10:1	11:1	22:1
Average	5,750	28,750	31,440	60,190	5:1	5:1	10:1
Maximum	10,870	28,750	31,440	60,190	3:1	3:1	6:1
Year 2010 (estimated)							
Low	19,860	121,630	129,200	250,830	6:1	7:1	13:1
Average	45,900	121,630	129,200	250,830	3:1	3:1	5:1
Maximum	96,660	121,630	129,200	250,830	1:1	1:1	3:1

*Interest rates used for each year (to accumulate the contributions to 7/1/88) were the June rate for the HI trust fund for that year. (For 1988+, June rates from the 1988 Trustees Report Alternative II-B were used).

**Present value at July 1, 1988 and 2010, of expected future benefits, discounted for both interest and mortality effects. Mortality is based on life tables for appropriate cohort group. 1988 Trustees Report Alternative II-B June interest rates were used, including the assumed ultimate interest rate of 6.125 percent.

***Assumes (for a couple) that only one spouse had covered earnings since 1986 and the other had no covered earnings at all. For couples where both spouses have covered earnings (assuming, as it is assumed throughout, that at least one of them has earned enough quarters of coverage to entitle them to HI), the ratio would be somewhere between the single person ratio and the couple ratio for the spouse with the higher covered earnings.

SOURCE: Health Care Financing Administration, Office of the Actuary: Office of Medicare Cost Estimates, Division of Hospital Insurance. January 27, 1989.

For Medicare SMI (Table 6), the premium amounts contributed by all Medicare enrollees cover only a small part of the total cost of SMI benefits. For example, the monthly SMI premium covers only about 25 percent of enrollee SMI insurance costs. The remaining 75 percent is paid out of general revenue funds.

Table 6

Ratio of Medicare supplementary medical insurance payments to premium income, and percent change: Fiscal years 1967-88

Fiscal year	Benefit payments			Ratio of benefit payments to premium income		
	Total	Aged	Disabled	Total	Aged	Disabled
1967	$664	$664	N/A	1.0	1.0	N/A
1970	1,979	1,979	N/A	2.1	2.1	N/A
1971	2,035	2,035	N/A	1.6	1.6	N/A
1972	2,255	2,255	N/A	1.7	1.7	N/A
1973	2,391	2,391	N/A	1.7	1.7	N/A
1974	2,874	2,555	$319	1.7	1.6	2.6
1975	3,765	3,312	453	2.0	1.9	3.0
1976	4,672	4,064	608	2.4	2.3	3.6
Transitional qtr.	1,269	1,083	186	2.4	2.2	4.0
1977	5,867	5,035	832	2.7	2.5	4.0
1978	6,852	5,821	1,031	2.8	2.7	4.2
1979	8,259	6,964	1,295	3.1	2.9	4.9
1980	10,144	8,512	1,632	3.5	3.2	5.6
1981	12,345	10,382	1,963	3.7	3.5	5.9
1982	14,806	12,404	2,402	3.9	3.6	6.5
1983	17,487	14,783	2,704	4.1	3.9	6.9
1984	19,473	16,845	2,628	4.0	3.8	5.9
1985	21,808	19,075	2,733	3.9	3.8	5.7
1986	25,169	22,180	2,989	4.4	4.3	6.0
1987	29,937	26,350	3,587	4.6	4.5	6.2
1988	33,682	29,797	3,885	3.8	3.7	4.9
	Percent change					
1967-88	4,973%	4,388%	N/A	—	—	—
1974-88	1,072	1,066	1,118%	—	—	—
1986-87	19	19	20	—	—	—
1987-88	13	13	8	—	—	—

NOTES: For more detail on fund transactions, see Annual Report of the Board of Trustees of the Supplementary Medical Insurance Trust Fund. N/A denotes not applicable.

SOURCE: Health Care Financing Administration: Office of the Actuary.

- Expressed as a ratio, $3.80 is paid out in SMI benefits (during FY 1988) for each $1 of SMI premium paid in, by or on behalf of all Medicare enrollees.
- For disabled SMI enrollees, an estimated $4.90 is paid out in SMI benefits for each $1 of SMI premium; this ratio is nearly one-third higher than that for the aged beneficiaries ($3.70).
- The ratio of SMI benefit payments to premium income has increased from 1.0 in 1967 to 4.6 in 1987.
- The decline in the ratio from FY 1987 (4.6 to 1) to FY 1988 (3.8 to 1) reflects, to a large degree, the implementation of the Medicare Catastrophic Coverage Act (MCCA) of 1988. The MCCA of 1988 was repealed by Congress in 1989.

II. Summary of Medicare enrollment

Medicare consists of two separate but complementary insurance programs; hospital insurance (HI) and supplementary medical insurance (SMI). HI covers inpatient hospital and skilled nursing facility services, home health care, and hospice care. SMI covers physicians' and related services for eligible persons who voluntarily pay premiums or whose premiums are paid for them.

All persons 65 years of age or over who are entitled to monthly social security benefits or payments from the railroad retirement system are eligible for benefits under the HI program. Since July 1, 1973, disabled persons entitled to cash benefits under the social security or railroad retirement programs have also been eligible for HI benefits. A person must be disabled for 6 calendar months before disability benefits begin and then be entitled to 24 months of cash benefits before becoming eligible for HI benefits. Thus, Medicare coverage begins the 30th month after the first full calendar month of disability.

HI protection also extends to persons who have end stage renal disease (ESRD) and require renal dialysis or a kidney transplant. ESRD patients are covered by Medicare if they are currently insured, entitled to monthly social security benefits, or are spouses or dependent children. Eligibility for coverage begins the third month after renal dialysis treatments begin or before this qualifying dialysis period for ESRD enrollees who receive kidney transplants without starting or receiving dialysis in preparation for transplantation. Eligibility ends with the 36th month after a person receives a kidney transplant or after dialysis treatment has been terminated.

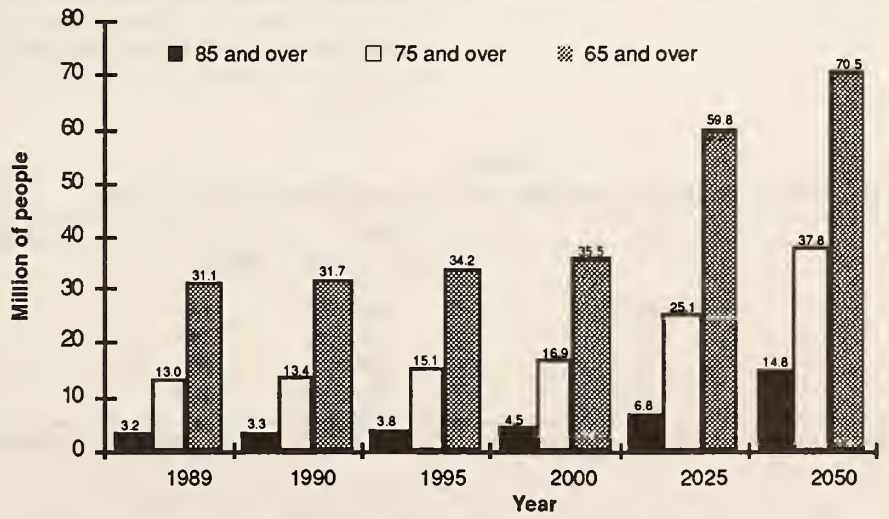
The 1972 Amendments to the Social Security Act, effective July 1973, permit most persons 65 years of age or over who are ineligible for HI coverage to enroll voluntarily by paying a monthly premium. This "premium-HI" was set at $234 a month for 1988 and represents the full cost of the HI premium. To obtain premium-HI, the enrollee must also obtain SMI coverage. Persons entitled to benefits under the HI program and most other persons 65 years of age or over may voluntarily enroll in SMI. (Source: *Medicare and Medicaid Data Book, 1988*). Nearly everyone covered by HI voluntarily enrolls in SMI.

Unlike HI (except for premium-HI enrollees), SMI requires a monthly premium payment. Under buy-in agreements, most State Medicaid programs pay those premiums for individuals who qualify for both Medicare and Medicaid benefits.

The aged population is growing more rapidly in proportion to the Nation's total population. In 1967, 10 percent of the United States population was age 65 years or over; by 1987, the proportion rose to 12 percent. Actuarial projections indicate that the aged population will continue to expand and will represent 19 to 20 percent of the population by the year 2025. As shown in Figure 1, the number of aged enrollees is projected to increase from 31.1 million in 1989 to 59.8 million individuals in 2025 to 70.5 million in 2050.

Figure 1

Projected growth of the social security aged population: Selected calendar years



SOURCE: Social Security Administration, Office of the Actuary.

Table 7: Number of aged and disabled Medicare enrollees: July 1, 1988

- Of the total Medicare HI and/or SMI population (33.0 million) on July 1, 1988, 29.9 million (90.6 percent) were aged enrollees, and 3.1 million (9.4 percent) were disabled enrollees.
- Among the aged enrollees (29.9 million), 29.3 million individuals (98.0 percent) were enrolled in HI; 28.8 million (96.3 percent) were SMI enrollees.
- Among the disabled enrollment population (3.1 million), all were enrolled in the HI program (disabled enrollees under Medicare cannot have SMI coverage only); 2.8 million disabled enrollees also had SMI coverage.
- Nearly 94 percent (31.1 million) of the Medicare population was eligible for HI and SMI benefits.
- Less than 2 percent (0.6 million) of all aged Medicare enrollees had SMI coverage only; disabled enrollees are not permitted to enroll for SMI only.

Table 8: Number of enrollees in the Medicare hospital and/or supplementary medical insurance programs, by type of entitlement: July 1, 1966-88

- Total Medicare HI and/or SMI enrollment increased 73 percent during the study period, rising from 19.1 million enrollees in 1966 to 33.0 million in 1988, an average annual rate of growth (AARG) of 2.5 percent.
- HI and/or SMI enrollment for aged individuals increased 57 percent, from 19.1 million in 1966 to 29.9 million in 1988, an AARG of 2.1 percent.
- On the other hand, enrollment for disabled individuals increased 80 percent, going from 1.7 million in 1973 (the first year of coverage for disabled enrollees in the Medicare program) to 3.1 million in 1988, an AARG of 4.0 percent.
- Disabled enrollees represented 7.3 percent of all HI and/or SMI enrollees in 1973, but increased to 9.4 percent in 1988.
- From 1967 through 1988, the number of SMI enrollees increased at a slightly higher AARG than did the number of HI enrollees; the HI AARG was 2.4 percent versus the SMI AARG of 2.7 percent.

Table 9: Number of Medicare enrollees and type of entitlement, by demographic characteristics: July 1, 1988

- In 1988, by gender, the female Medicare enrollees accounted for 58 percent (19.1 million) of the total HI and/or SMI population (33.0 million).
- Medicare enrollees 85 years of age and over accounted for over 9 percent (3.1 million) of all Medicare enrollees.
- Enrollees of all races other than white represented about 11 percent (3.5 million) of the Medicare enrollment population.
- Among the regions, the South Region had the largest proportion (33 percent) of Medicare enrollees, followed by the North Central (25 percent), Northeast (22 percent) and West Region (18 percent).
- By Medicare status, enrollees with end stage renal disease accounted for only 0.4 percent (141,300) of the Medicare enrollee population.
- About 26 percent of all Medicare enrollees resided in rural areas.

Table 7
Number of aged and disabled Medicare enrollees: July 1, 1988

Enrollment type	Total	Aged	Disabled
		Number of enrollees in millions	
HI and/or SMI	33.0	29.9	3.1
HI and SMI	31.1	28.2	2.8
HI	32.4	29.3	3.1
SMI	31.6	28.8	2.8
SMI only	0.6	0.6	—

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System.

Table 10: Number and type of HI and/or SMI Medicare enrollees, metropolitan (urban) and nonmetropolitan (rural) areas, by area of residence: July 1, 1988

- Three States—California (3.2 million), New York (2.5 million), and Florida (2.2 million)—accounted for nearly one-fourth of all Medicare enrollees.
- The States with the lowest number of Medicare enrollees were Alaska (21,818), Wyoming (48,628), and Vermont (72,462).
- Nearly three-fourths (23.6 million) of all Medicare HI and/or SMI enrollees were located in urban areas of the United States.
- Rhode Island, New Jersey, and the District of Columbia do not have any geographic areas identified by the Census Bureau as rural.
- Enrollees residing in urban areas of eight States—New Jersey, New York, Pennsylvania, Illinois, Ohio, Florida, Texas, and California—accounted for 57 percent (13.4 million) of all Medicare urban enrollees.
- In each of the seven States—Vermont, North Dakota, South Dakota, Mississippi, Idaho, Montana, and Wyoming—rural beneficiaries accounted for over 70 percent of all Medicare enrollees.

Table 11: Total resident population of the United States, total Medicare population, and Medicare enrollees as a percent of resident population, by State of residence: July 1, 1988

- As of July 1, 1988, Medicare enrollees represented 13.1 percent (32.3 million) of the total United States resident population (245.8 million).
- The States with the lowest proportion of Medicare enrollment to total population were Alaska (4.2 percent), Utah (8.8), Colorado (10.1), Wyoming (10.2), Texas (10.3), and Hawaii (10.7 percent) (Figure 2).
- In contrast, the States with the highest proportion of Medicare enrollees were Florida (17.8 percent), West Virginia (16.0), Arkansas (15.9), Pennsylvania (15.9), Iowa (15.8), Rhode Island (15.6), and South Dakota (15.1 percent).

Table 8

Number of enrollees in the Medicare hospital and/or supplementary medical insurance programs, by type of entitlement: July 1, 1966-88 1/

Year 1/	Type of entitlement								
	Hospital insurance and/or supplementary medical insurance			Hospital insurance			Supplementary medical insurance		
	Total	Aged enrollees	Disabled enrollees	Total	Aged enrollees	Disabled enrollees	Total	Aged enrollees	Disabled enrollees
	Amount in thousands								
1966	19,109	19,109	—	19,082	19,082	—	17,736	17,736	—
1967	19,521	19,521	—	19,494	19,494	—	17,893	17,893	—
1968	19,821	19,821	—	19,770	19,770	—	18,805	18,805	—
1969	20,103	20,103	—	20,014	20,014	—	19,195	19,195	—
1970	20,491	20,491	—	20,361	20,361	—	19,584	19,584	—
1971	20,915	20,915	—	20,742	20,742	—	19,975	19,975	—
1972	21,332	21,332	—	21,115	21,115	—	20,351	20,351	—
1973	23,545	21,815	1,731	23,301	21,571	1,731	22,491	20,921	1,570
1974	24,201	22,273	1,928	23,924	21,996	1,928	23,167	21,421	1,745
1975	24,959	22,790	2,168	24,640	22,472	2,168	23,905	21,945	1,959
1976	25,663	23,271	2,392	25,313	22,920	2,392	24,614	22,446	2,168
1977	26,458	23,838	2,619	26,094	23,474	2,619	25,363	22,991	2,373
1978	27,164	24,371	2,793	26,777	23,984	2,793	26,074	23,531	2,543
1979	27,859	24,948	2,911	27,459	24,548	2,911	26,757	24,098	2,659
1980	28,478	25,515	2,963	28,067	25,104	2,963	27,400	24,680	2,719
1981	29,010	26,011	2,999	28,590	25,591	2,999	27,949	25,182	2,759
1982	29,494	26,540	2,954	29,069	26,115	2,954	28,412	25,707	2,705
1983	30,026	27,109	2,918	29,587	26,670	2,918	28,975	26,292	2,682
1984	30,455	27,571	2,884	29,996	27,112	2,884	29,415	26,754	2,651
1985	31,083	28,176	2,907	30,589	27,683	2,907	29,989	27,311	2,678
1986	31,750	28,791	2,958	31,216	28,257	2,959	30,590	27,863	2,727
1987	32,411	29,380	3,031	31,853	28,822	3,031	31,170	28,382	2,788
1988	32,980	29,879	3,102	32,413	29,312	3,102	31,617	28,780	2,837
AARG 2/	2.5	2.1	4.0	2.4	2.0	4.0	2.7	2.2	4.0

1/ Data for each year, 1968-88 reflect information recorded in the health insurance master file through March of the year following the report year. Data for 1966 and 1967 reflect information recorded through December of the year following the report year.
2/ Average annual rate of growth.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Statistics and Data Management.

Table 9
Number of Medicare enrollees and type of entitlement, by demographic characteristics: July 1, 1988

Demographic characteristic	Hospital insurance and/or supplementary medical insurance	Hospital insurance	Supplementary medical insurance
Total	32,980,033	32,413,038	31,617,082
Sex			
Male	13,928,546	13,773,367	13,183,079
Aged	11,966,663	11,811,499	11,403,068
Disabled	1,961,883	1,961,868	1,780,011
Female	19,051,487	18,639,671	18,434,003
Aged	17,911,865	17,500,057	17,377,086
Disabled	1,139,622	1,139,614	1,056,917
Age			
Under 65 years	3,101,505	3,101,482	2,836,928
65-74 years	17,220,748	16,916,180	16,482,107
75-84 years	9,555,922	9,309,079	9,362,610
85 years and over	3,101,858	3,086,297	2,935,437
Race			
White	28,483,022	28,146,680	27,394,033
Aged	26,063,847	25,727,522	25,187,176
Disabled	2,419,175	2,419,158	2,206,857
Other	3,502,188	3,312,029	3,280,120
Aged	2,878,581	2,688,428	2,704,420
Disabled	623,607	623,601	575,700
Unknown	994,823	954,329	942,929
Aged	936,100	895,606	888,558
Disabled	58,723	58,723	54,371
Region			
Northeast	7,292,857	7,170,579	7,034,317
North Central	8,187,511	8,107,740	7,962,718
South	10,991,777	10,765,581	10,667,798
West	5,799,924	5,664,138	5,611,609
Metropolitan statistical area 1/			
Urban	23,648,732	23,213,580	22,864,390
Aged	21,514,349	21,079,215	20,887,229
Disabled	2,134,383	2,134,365	1,977,161
Rural	8,648,514	8,518,114	8,432,734
Aged	7,787,723	7,657,328	7,625,073
Disabled	860,791	860,786	807,661
Type of enrollment			
Aged	29,832,479	29,266,835	28,734,695
Disabled	3,006,254	3,006,245	2,746,700
End stage renal disease	141,300	139,958	135,687

1/ Excludes enrollment outside the United States.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Statistics and Data Management.

Table 10

Number and type of HI and/or SMI Medicare enrollees, metropolitan (urban) and nonmetropolitan (rural) areas, by area of residence: 1988

Area of residence	Aged and disabled enrollees			Aged enrollees			Disabled enrollees		
	Total 1/	Urban 2/	Rural	Total 1/	Urban 2/	Rural	Total 1/	Urban 2/	Rural
United States	32,297,246	23,623,555	8,648,514	29,302,072	21,492,056	7,787,723	2,995,174	2,131,499	860,791
Northeast	7,292,857	5,802,876	814,107	6,674,968	5,936,163	738,805	617,889	542,587	75,302
North Central	8,187,511	5,340,009	2,847,502	7,449,538	4,831,717	2,617,821	737,973	508,292	229,681
South	10,992,277	7,101,715	3,890,062	9,855,890	6,425,617	3,430,273	1,136,387	676,098	459,789
West	5,799,924	4,703,081	1,096,843	5,299,383	4,298,559	1,000,824	500,541	404,522	96,019
New England	1,844,035	1,588,535	255,500	1,693,295	1,460,296	232,999	150,740	128,239	22,501
Connecticut	456,174	442,276	13,898	423,636	411,065	12,571	32,538	31,211	1,327
Maine	177,562	99,435	78,127	160,010	89,921	70,089	17,552	9,514	8,038
Massachusetts	850,277	793,943	56,334	781,424	727,916	53,508	68,853	66,027	2,826
New Hampshire	132,166	86,314	45,852	121,423	78,990	42,433	10,743	7,324	3,419
Rhode Island	155,394	155,394	—	141,231	141,231	—	14,163	14,163	—
Vermont	72,462	11,173	61,289	65,571	11,173	54,398	6,891	—	6,891
Middle Atlantic	5,448,822	4,890,215	558,607	4,981,673	4,475,867	505,806	467,149	414,348	52,801
New Jersey	1,066,274	1,066,274	—	980,745	980,745	—	85,529	85,529	—
New York	2,480,281	2,227,410	252,871	2,256,318	2,027,670	228,648	223,963	199,740	24,223
Pennsylvania	1,902,267	1,596,531	305,736	1,744,610	1,467,452	277,158	157,657	129,079	28,578
East North Central	5,612,121	4,130,554	1,481,567	5,073,337	3,727,040	1,346,297	538,784	403,514	135,270
Illinois	1,499,690	1,148,952	350,738	1,372,813	1,049,947	322,866	126,877	99,005	27,872
Indiana	736,612	480,399	256,213	663,108	431,575	231,533	73,504	48,824	24,680
Michigan	1,189,753	904,799	284,954	1,062,599	805,797	256,802	127,154	99,002	28,152
Ohio	1,491,365	1,170,768	320,597	1,340,908	1,054,339	286,569	150,457	116,429	34,028
Wisconsin	694,701	425,636	269,065	633,909	385,382	248,527	60,792	40,254	20,538
West North Central	2,575,390	1,209,455	1,365,935	2,376,201	1,104,677	1,271,524	199,189	104,778	94,411
Iowa	448,645	158,963	289,682	416,186	144,812	271,374	32,459	14,151	18,308
Kansas	355,287	148,090	207,197	331,066	135,920	195,146	24,221	12,170	12,051
Minnesota	572,531	315,684	256,847	531,387	290,477	240,910	41,144	25,207	15,937
Missouri	761,358	451,708	309,650	689,999	410,515	279,484	71,359	41,193	30,166
Nebraska	233,226	83,700	149,526	217,847	76,492	141,355	15,379	7,208	8,171
North Dakota	96,606	27,323	69,283	89,859	24,802	65,057	6,747	2,521	4,226
South Dakota	107,737	23,987	83,750	99,857	21,659	78,198	7,880	2,328	5,552
South Atlantic	5,825,863	4,158,807	1,666,556	5,250,934	3,790,586	1,460,348	574,929	368,221	206,208
Delaware	83,797	52,208	31,589	75,604	47,347	28,257	8,193	4,861	3,332
District of Columbia	78,281	78,281	—	71,391	71,391	—	6,890	6,890	—
Florida	2,200,686	1,967,303	233,383	2,045,714	1,831,774	213,940	154,972	135,529	19,443
Georgia	699,057	392,710	306,347	607,700	342,929	264,771	91,357	49,781	41,576
Maryland	517,035	468,833	48,202	472,765	428,650	44,115	44,270	40,183	4,087
North Carolina	843,182	421,758	421,424	745,321	375,408	369,913	97,861	46,350	51,511
South Carolina	418,004	237,873	179,631	362,040	206,407	155,633	55,964	31,466	23,998
Virginia	685,805	430,226	255,579	612,286	389,287	222,999	73,519	40,939	32,580
West Virginia	300,016	109,615	190,401	258,113	97,393	160,720	41,903	12,222	29,681

See footnotes at end of table.

Table 10—Continued
Number and type of HI and/or SMI Medicare enrollees, metropolitan (urban) and nonmetropolitan (rural) areas, by area of residence: 1988

Area of residence	Aged and disabled enrollees			Aged enrollees			Disabled enrollees		
	Total 1/	Urban 2/	Rural	Total 1/	Urban 2/	Rural	Total 1/	Urban 2/	Rural
East South Central	2,102,888	1,046,659	1,056,229	1,834,988	922,642	912,346	267,900	124,017	143,883
Alabama	562,678	342,492	220,186	492,976	300,490	192,486	69,702	42,002	27,700
Kentucky	517,605	219,923	297,682	447,854	194,698	253,156	69,751	25,225	44,526
Mississippi	357,400	83,859	273,541	307,608	72,068	235,540	49,792	11,791	38,001
Tennessee	665,205	400,385	264,820	586,550	355,386	231,164	78,655	44,999	33,656
West South Central	3,063,526	1,896,249	1,167,277	2,769,968	1,712,389	1,057,579	293,558	183,860	109,698
Arkansas	380,830	121,512	259,318	335,942	106,289	229,653	44,888	15,223	29,665
Louisiana	513,190	331,389	181,801	446,765	289,004	157,761	66,425	42,385	24,040
Oklahoma	437,479	213,284	224,195	400,738	195,438	205,300	36,741	17,846	18,895
Texas	1,732,027	1,230,064	501,963	1,586,523	1,121,658	464,865	145,504	108,406	37,098
Mountain	1,520,922	944,312	576,610	1,389,150	863,309	525,841	131,772	81,003	50,769
Arizona	461,619	347,058	114,561	422,743	318,761	103,982	38,876	28,297	10,579
Colorado	334,307	253,132	81,175	304,769	230,326	74,443	29,538	22,806	6,732
Idaho	126,060	21,867	104,193	116,323	20,227	96,096	9,737	1,640	8,097
Montana	112,839	25,439	87,400	102,394	22,912	79,482	10,445	2,527	7,918
Nevada	120,880	98,444	22,436	109,869	89,050	20,819	11,011	9,394	1,617
New Mexico	167,448	75,842	91,606	150,051	68,162	81,889	17,397	7,680	9,717
Utah	149,141	109,146	39,995	138,056	100,487	37,569	11,085	8,659	2,426
Wyoming	48,628	13,384	35,244	44,945	13,384	31,561	3,683	—	3,683
Pacific	4,279,002	3,758,769	520,233	3,910,233	3,435,250	474,983	368,769	323,519	45,250
Alaska	21,818	8,007	13,811	19,226	6,880	12,346	2,592	1,127	1,465
California	3,152,110	2,956,921	195,189	2,875,989	2,699,628	176,361	276,121	257,293	18,828
Hawaii	117,699	85,635	32,064	109,087	79,462	29,625	8,612	6,173	2,439
Oregon	403,156	260,113	143,043	371,182	239,457	131,725	31,974	20,656	11,318
Washington	584,219	448,093	136,126	534,749	409,823	124,926	49,470	38,270	11,200

1/ Includes unknown area of residence not shown separately.
2/ Includes unknown urban/rural status.

NOTES: Refer to Glossary for the definition of urban and rural classifications. HI denotes Medicare hospital insurance; SMI denotes supplementary medical insurance.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 11

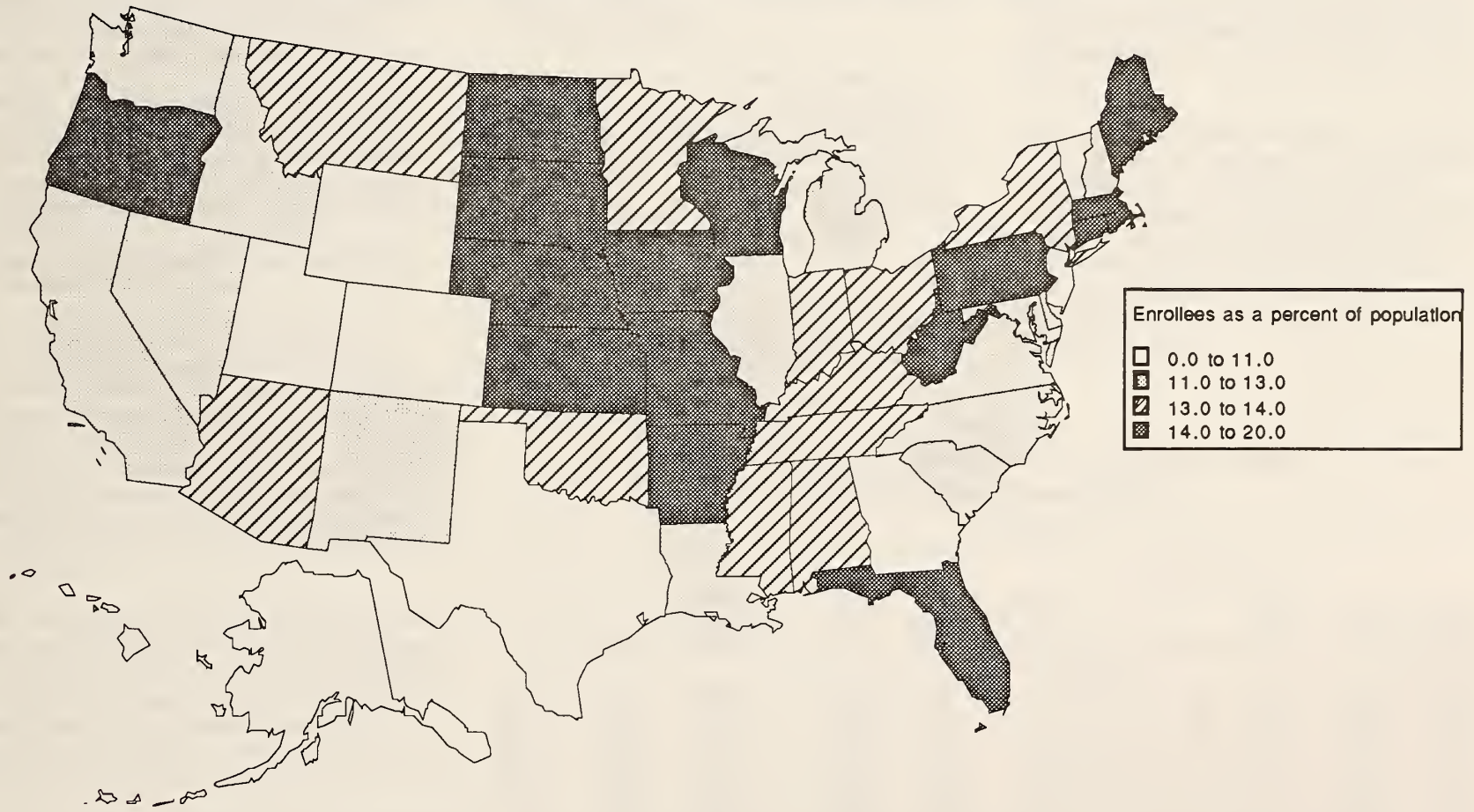
Total resident population of the United States, total Medicare population, and Medicare enrollees as a percent of resident population, by State of residence: July 1, 1988

State of residence	Resident population in thousands	Medicare population in thousands	Medicare enrollees as percent of population	State of residence	Resident population in thousands	Medicare population in thousands	Medicare enrollees as percent of population
Total	245,807	32,297 1/	13.1				
Alabama	4,102	563	13.7	Missouri	5,141	761	14.8
Alaska	524	22	4.2	Montana	805	113	14.0
Arizona	3,489	462	13.2	Nebraska	1,602	233	14.6
Arkansas	2,395	381	15.9	Nevada	1,054	121	11.5
California	28,314	3,152	11.1	New Hampshire	1,085	132	12.2
Colorado	3,301	334	10.1	New Jersey	7,721	1,066	13.8
Connecticut	3,233	456	14.1	New Mexico	1,507	167	11.1
Delaware	660	84	12.7	New York	17,909	2,480	13.8
District of Columbia	617	78	12.7	North Carolina	6,489	843	13.0
Florida	12,335	2,201	17.8	North Dakota	667	97	14.5
Georgia	6,342	699	11.0	Ohio	10,855	1,491	13.7
Hawaii	1,098	118	10.7	Oklahoma	3,242	437	13.5
Idaho	1,003	126	12.6	Oregon	2,767	403	14.6
Illinois	11,614	1,500	12.9	Pennsylvania	12,001	1,902	15.9
Indiana	5,556	737	13.3	Rhode Island	993	155	15.6
Iowa	2,834	449	15.8	South Carolina	3,470	417	12.0
Kansas	2,495	355	14.2	South Dakota	713	108	15.1
Kentucky	3,727	518	13.9	Tennessee	4,895	665	13.6
Louisiana	4,408	513	11.6	Texas	16,841	1,732	10.3
Maine	1,205	178	14.7	Utah	1,690	149	8.8
Maryland	4,622	517	11.2	Vermont	557	72	13.0
Massachusetts	5,889	850	14.4	Virginia	6,015	686	11.4
Michigan	9,240	1,190	12.9	Washington	4,648	584	12.6
Minnesota	4,307	573	13.3	West Virginia	1,876	300	16.0
Mississippi	2,620	357	13.6	Wisconsin	4,855	695	14.3
				Wyoming	479	49	10.2

1/ Includes enrollees with unknown State of residence.

SOURCE: Resident population from the Census Bureau, 1980 census. Medicare population from the Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System.

Figure 2
Medicare enrollment as a percent of resident population, United States, 1988



SOURCE: Resident population from the Census Bureau, 1980 census. Medicare population counts are from the Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

III. Summary of Medicare program payments

Medicare program payment data provide administrative and statistical information on the use and cost of hospital insurance (HI) and supplementary medical insurance (SMI) benefits.

Medicare is the largest source of public health care funds. In 1988, Medicare provided (on a cash-flow basis) an estimated $90 billion (Table 12) in benefit payments for the 33.0 million aged and disabled enrollees. Thus, Medicare accounted for about
19 percent of all national personal health care expenditures ($478.3 billion).

The Medicare program is primarily an HI program. In 1988, inpatient hospital program payments represented 58.9 percent of all Medicare program payments ($81.4 billion—on an incurred basis); home health agency payments, 2.4 percent; and skilled nursing facility payments, 1.0 percent. SMI program payments, on the other hand, were distributed as follows: Physician and supplier payments, 28.8 percent; and outpatient payments, 8.9 percent.

From 1967 to 1983, Medicare program payments grew from $4.2 to $53.4 billion, an average annual rate of change (AARC) of 17.2 percent (Table 13). During the same period, the AARC for inpatient hospital payments and physician/supplier payments increased 17.4 percent and 16.3 percent, respectively (Table 14).

From 1983 to 1988, Medicare payments increased to $81.4 billion, an AARC of 8.8 percent. The slower rate of growth in program payments reflected, for the most part, the introduction (effective October 1, 1983) of the Medicare prospective payment system (PPS) for participating short-stay hospitals. During this period inpatient hospital payments increased at an AARC of 6.8 percent.

Part B physician cost containment measures enacted by Congress in the Deficit Reduction Act (DEFRA) of 1984 placed a freeze on Medicare physician payment levels for a 15-month period beginning July 1, 1984. The freeze was extended by Congress through April 1986 for participating physicians and through December 1986 for nonparticipating physicians.

DEFRA also created the Medicare participating physician and supplier program that encouraged physicians to accept Medicare allowed charges as payment in full. Thus, DEFRA cost-containment measures were instrumental in bringing down the AARC in physician payments from 16.3 percent during the 1967-83 period to 11.4 percent between 1983 and 1988.

The Omnibus Budget Reconciliation Act (OBRA) of 1989 substantially changed the way physicians will be paid under Medicare in the future by creating a Medicare fee schedule (MFS) that will be based on a relative value scale for each physician procedure in association with various geographic adjustment indexes. The MFS will be phased in beginning 1992 and should be completed by 1996.

Table 12

Personal health care expenditures 1/, by source of funds: Selected calendar years 1980-88

			Third parties							
						Government				
Year	Total	Direct patient payments	All third parties	Private health insurance	Other private funds	Total	Federal	State and local	Medi-care 2/	Medi-caid 3/
					Amount in billions					
1980	$218.3	$58.4	$160.0	$65.3	$7.6	$87.1	$63.5	$23.6	$36.4	$24.8
1983	312.4	78.8	233.6	97.4	11.0	125.2	93.4	31.8	58.5	33.6
1984	338.6	85.0	253.6	106.4	11.4	135.8	101.7	34.1	64.3	36.0
1985	367.2	91.7	275.5	114.1	12.9	148.5	111.6	36.9	70.1	39.7
1986	397.7	96.8	300.9	125.3	13.5	162.1	120.5	41.6	75.4	42.9
1987	434.7	102.4	332.3	139.8	14.7	177.8	130.9	46.9	81.7	48.2
1988	478.3	113.2	365.2	155.2	16.0	194.0	143.2	50.8	89.7	52.3

1/ Represents benefit payments incurred on a cash flow basis. Due to differences in methodology and completeness, the benefit payments shown above are about 10 percent higher than the corresponding program payments reported in this section, which are based on the date the service was incurred.
2/ Subset of Federal funds.
3/ Subset of Federal and State and local funds.

SOURCE: Health Care Financing Administration: Data are from the Office of the Actuary and the Office of National Cost Estimates.

Table 13: Medicare program payments, by types of entitlement: Calendar years 1967-88

In 1988, total Medicare program payments amounted to $81.4 billion; hospital insurance (HI) payments comprised about 62 percent ($50.7 billion), and supplementary medical insurance (SMI) payments made up 38 percent ($30.7 billion) of all Medicare program payments (Figure 3).

In 1974, the first full year of the disability benefit, HI and SMI payments represented 72 percent and 28 percent, respectively, of all Medicare program payments.

- From 1967 through 1988, HI and/or SMI Medicare program payments increased from $4.2 billion to $81.4 billion, an average annual rate of growth (AARC) of 15.1 percent.
- During the period 1967-88, HI program payments increased from $3.0 billion to $50.7 billion, an AARC of 14.5 percent.
- SMI program payments increased from $1.3 billion in 1967 to $30.7 billion in 1988, an AARC of 16.4 percent.

Table 14: Number of persons enrolled and served under Medicare, amount of program payments, and average annual rates of change, by types of entitlement and service: Selected calendar years 1967-88

- Since the first full year of Medicare (1967), the total enrollment has increased steadily through 1988 at an AARC of 2.5 percent; SMI enrollment grew 2.7 percent.
- During the period 1967-88, the number of persons served per 1,000 Medicare enrollees increased from 366 to 759, an AARC of 3.5 percent.
- In 1988, inpatient hospital services ($47.9 billion) accounted for about 59 percent of all Medicare payments ($81.4 billion); Physician payments accounted for 29 percent ($23.5 billion) of all Medicare program payments. In 1967, the corresponding figures were 63 percent and 29 percent, respectively (Figure 4).
- From 1983 through 1988, following the inception of the Medicare prospective payment system (PPS), inpatient hospital payments increased at an AARC of 6.8 percent, substantially less than the AARC for the pre-PPS period of 1967-83 (17.4 percent).
- From 1967 through 1988, the greatest changes in program payments occurred for outpatient and home health agency (HHA) services.
- Outpatient services increased from $38 million in 1967 to $7.2 billion in 1988, an AARC of 28 percent. Part A HHA services increased from $26 million in 1967 to $1.9 billion in 1988, AARC of 23 percent.
- The average total program payment per person served increased from $593 in 1967 to $3,254 in 1988.
- In 1988, by type of service, the average program payment ranged from $511 for outpatient services to $7,520 for inpatient hospital services.
- During the period 1967-83, program payments for home health agency (HHA) and outpatient services showed the largest AARC, 28.1 percent and 32.5 percent, respectively
- From 1983 through 1988, following the inception of the Medicare prospective payment system, total Medicare program payments increased at an AARC of 8.8 percent, substantially less than the AARC for the period 1967-83 (17.2 percent).

Table 15: Summary of the types of Part A and/or B services provided to Medicare beneficiaries, persons served, and amount and average of program payments, by total Part A and/or B program payments: Calendar year 1988

- The majority of Medicare program payments were used by a relatively small proportion of beneficiaries who had payments of $5,000 or more per person; that is, only 17.5 percent (4.4 million) of all persons served (25.0 million) accounted for 77.7 percent ($63.2 billion) of the total Medicare program payments in 1988 ($81.4 billion).
- In contrast, beneficiaries with Medicare program payments of less than $500 per person accounted for nearly half (12.3 million) of all persons using Medicare services but only 2.6 percent ($2.1 billion) of all payments (Figure 5).
- Most beneficiaries with less than $1,000 in program payments per person received Part B services only.
- The average total Medicare program payment per user was $3,254, ranging from a low of $511 per user for outpatient services to a high of $7,502 for inpatient hospital services.
- For Medicare beneficiaries with $25,000 or more in program payments, the average payment per user ranged from $1,842 for HHA services to $28,268 for inpatient hospital services.

Table 16: Program payments for Medicare beneficiaries residing in urban and rural areas, by area of residence: Calendar year 1988

- The average program payment per enrollee, whether residing in urban or rural areas, was $2,508. For urban enrollees the average payment per enrollee was $2,651, or 25 percent higher than the average for rural enrollees ($2,122).
- By State, the average program payment per enrollee ranged from a low of $1,598 in Minnesota to a high of $4,178 in the District of Columbia, a difference of 161 percent.
- An estimated 77 percent ($62.6 billion) of all Medicare program payments ($81.0 billion) were for beneficiaries residing in urban areas.
- In the Northeast Region, over 90 percent ($18.1 billion) of the program payments ($20.0 billion) were for Medicare beneficiaries residing in urban areas. Similarly, in the West Region, approximately 83 percent ($12.1 billion) of all program payments ($14.6 billion) were for urban beneficiaries.
- Three geographic census areas (the District of Columbia, New Jersey, and Rhode Island) were designated entirely as metropolitan (urban) statistical areas.
- In contrast, nearly 50 percent ($2.6 billion) of the Medicare program payments in the West North Central Division was for beneficiaries residing in rural areas.
- In seven States (Vermont, North Dakota, South Dakota, Mississippi, Idaho, Montana, and Wyoming) rural beneficiaries accounted for over 70 percent of all program payments.

Table 13

Medicare program payments, by type of entitlement: Calendar years 1967-88

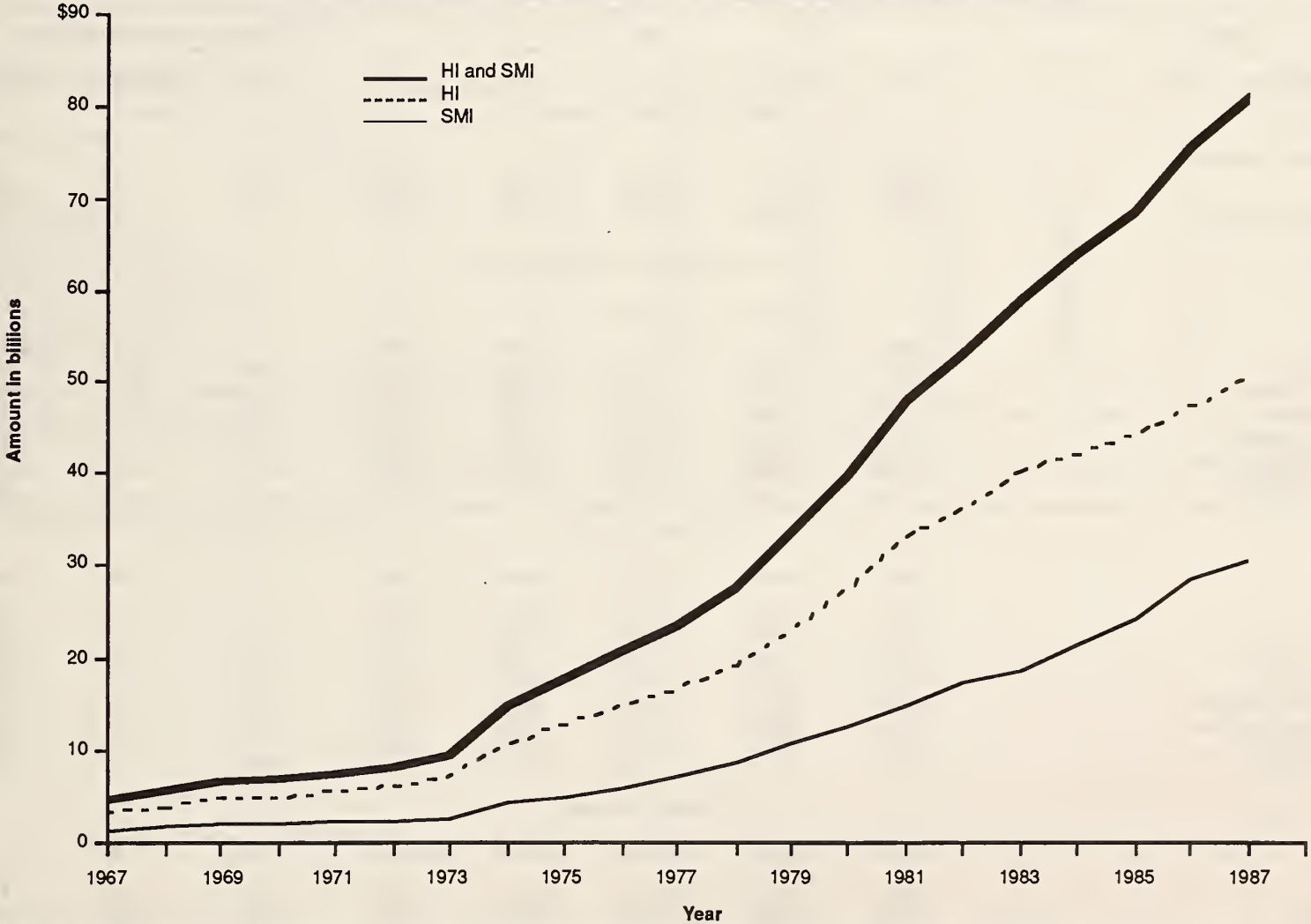
Year	Hospital insurance and supplementary medical insurance		Hospital insurance		Supplementary medical insurance	
	Total	Percent	Total	Percent	Total	Percent
			Amount in millions			
1967	$4,239.0	100.0	$2,967.0	70.0	$1,272.0	30.0
1968	5,289.5	100.0	3,766.9	71.2	1,522.6	28.8
1969	6,267.6	100.0	4,597.4	73.4	1,670.3	26.6
1970	6,572.0	100.0	4,740.3	72.1	1,831.6	27.9
1971	7,354.4	100.0	5,358.2	72.9	1,996.2	27.1
1972	8,019.4	100.0	5,835.7	72.8	2,183.7	27.2
1973	9,215.2	100.0	6,947.9	75.4	2,403.3	26.1
1974	14,548.5	100.0	10,519.1	72.3	4,029.4	27.7
1976	17,619.0	100.0	12,793.9	72.6	4,825.1	27.4
1977	20,476.8	100.0	14,709.9	71.8	5,766.9	28.2
1978	23,542.7	100.0	16,630.3	70.6	6,912.4	29.4
1979	27,699.1	100.0	19,257.9	69.5	8,441.2	30.5
1980	33,724.7	100.0	23,194.2	68.8	10,530.5	31.2
1981	39,918.4	100.0	27,486.4	68.9	12,432.0	31.1
1982	48,134.3	100.0	33,332.8	69.2	14,801.5	30.8
1983	53,437.9	100.0	36,313.6	68.0	17,124.4	32.0
1984 1/	59,132.2	100.0	40,607.5	68.7	18,524.7	31.3
1985	63,876.5	100.0	42,265.9	66.2	21,611.2	33.8
1986	68,862.9	100.0	44,565.7	64.7	24,297.3	35.3
1987	75,816.0	100.0	47,414.0	62.5	28,402.0	37.5
1988	81,403.4	100.0	50,688.7	62.3	30,714.7	37.7
			Average annual rate of change (percent)			
1967-73 2/	13.8	—	15.2	—	11.2	—
1967-83	17.2	—	16.9	—	17.6	—
1967-88	15.1	—	14.5	—	16.4	—
1974-83 3/	18.9	—	18.1	—	20.8	—
1983-88 4/ 5/	8.8	—	6.9	—	12.4	—
1985-88	8.4	—	6.2	—	12.4	—

1/ Starting in 1984, hospital insurance program payments are based on expenditures reported on Health Care Financing Administration (HCFA) billing form HCFA-1450 plus prospective payment system (PPS) short-stay hospital inpatient passthrough expenditures reported on HCFA intermediary benefit payment report.
2/ During this period, only aged enrollees were eligible for Medicare benefits.
3/ During these years prior to the implementation of the Medicare prospective payment system (PPS), both aged and disabled enrollees were eligible for Medicare benefits; the disability program became effective on July 1, 1973.
4/ The data show the effect of the establishment of PPS, effective on October 1, 1983.
5/ The Deficit Reduction Act of 1984, effective July 1, 1984, contributed also to the decreasing rate of change.

NOTE: Program payments, except those for the disabled in 1973, are amounts paid in a calendar year and are not adjusted for claims paid after data were compiled. Program-payment data differ from data on benefit payments, which include interim program payments, retroactive adjustments made to institutional providers, and projected total benefit payment amounts.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Statistics and Data Management and the Office of Research and Demonstrations.

Figure 3
Medicare program payments, by type of entitlement: Calendar years 1967-88



SOURCE: Health Care Financing Administration, Cureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 14
Number of persons enrolled and served under Medicare, amount of program payments, and average annual rates of change, by types of entitlement and service: Selected calendar years 1967-88

Type of entitlement and service	Year					Average annual rate of change		
	1967	1980	1983	1987	1988	1967-83	1983-88	1967-88
	Number of enrollees in thousands					Percent		
Type of entitlement								
Hospital insurance and/or supplementary medical insurance	19,521	28,478	30,026	32,412	32,980	2.7	1.9	2.5
Hospital insurance	19,494	28,067	29,588	31,853	32,413	2.6	1.8	2.5
Supplementary medical insurance	17,893	27,399	28,974	31,170	31,617	3.1	1.8	2.7
	Number of persons served in thousands							
Persons served 1/								
Total	7,154	18,031	19,732	24,096	25,018	6.5	4.9	6.1
Hospital insurance 2/	3,960	6,752	7,443	6,666	6,658	4.0	-2.2	2.5
Inpatient hospital services	3,601	6,672	7,170	6,349	6,373	4.4	-2.3	2.8
Skilled nursing facility services	354	257	265	288	384	-1.8	7.7	0.4
Home health agency services	126	726	1,318	1,533	1,579	15.8	3.7	12.8
Supplementary medical insurance 2/	6,523	17,822	19,472	23,941	24,859	7.1	5.0	6.6
Physician and other medical services	6,415	17,258	18,923	23,330	24,213	7.0	5.1	6.5
Outpatient hospital services 2/	1,511	7,538	9,089	13,150	14,119	11.9	9.2	11.2
Home health agency services	118	327	20	31	31	-10.5	9.2	-6.2
	Per 1,000 enrollees							
Total	366.5	633.2	657.2	743.4	758.6	3.7	2.9	3.5
Hospital insurance 2/	203.1	240.6	251.6	209.3	205.4	1.3	-4.0	0.1
Inpatient hospital services	184.7	237.7	242.3	199.3	196.6	1.7	-4.1	0.3
Skilled nursing facility services	18.2	9.2	9.0	9.0	11.8	-4.3	5.8	-2.0
Home health agency services	6.5	25.9	44.5	48.1	48.7	12.8	1.8	10.1
Supplementary medical insurance 2/	364.6	650.5	672.1	768.1	786.3	3.9	3.2	3.7
Physician and other medical services	358.5	629.9	653.1	748.5	765.8	3.8	3.2	3.7
Outpatient hospital services 2/	84.4	275.1	313.7	421.9	446.6	8.5	7.3	8.3
Home health agency services	6.6	11.9	0.7	1.0	1.0	-13.2	7.3	-8.7
	Amount in millions							
Program payments								
Total	$4,239	$33,725	$53,438	$75,816	$81,403	17.2	8.8	15.1
Hospital insurance 2/	2,967	23,194	36,314	47,414	50,689	16.9	6.9	14.5
Inpatient hospital services	2,659	22,297	34,519	45,118	47,925	17.4	6.8	14.8
Skilled nursing facility services	274	344	428	535	843	2.8	14.5	5.5
Home health agency services	26	478	1,366	1,760	1,921	28.1	7.1	22.7
Supplementary medical insurance 2/	1,272	10,531	17,124	28,402	30,715	17.6	12.4	16.4
Physician and other medical services	1,224	8,358	13,660	22,074	23,455	16.3	11.4	15.1
Outpatient hospital services 2/	38	1,962	3,443	6,290	7,217	32.5	16.0	28.4
Home health agency services	17	175	29	38	43	3.4	8.2	4.5

See footnotes at end of table.

Table 14—Continued
Number of persons enrolled and served under Medicare, amount of program payments, and average annual rates of change, by types of entitlement and service: Selected calendar years 1967-88

Type of entitlement and service	Year					Average annual rate of change		
	1967	1980	1983	1987	1988	1967-83	1983-88	1967-88
	Per person served					Percent		
Program payments								
Total	$593	$1,870	$2,708	$3,146	$3,254	10.0	3.7	8.4
Hospital insurance 2/	749	3,435	4,879	7,113	7,613	12.4	9.3	11.7
Inpatient hospital services	738	3,342	4,814	7,106	7,520	12.4	9.3	11.7
Skilled nursing facility services	774	1,339	1,615	1,858	2,195	4.7	6.3	5.1
Home health agency services	206	658	1,036	1,148	1,217	10.6	3.3	8.8
Supplementary medical insurance 2/	195	591	879	1,186	1,236	9.9	7.0	9.2
Physician and other medical services	191	484	722	946	969	8.7	6.1	8.0
Outpatient hospital services 2/	25	260	379	478	511	18.5	6.2	15.4
Home health agency services	144	535	1,450	1,226	1,387	15.5	-0.9	11.4

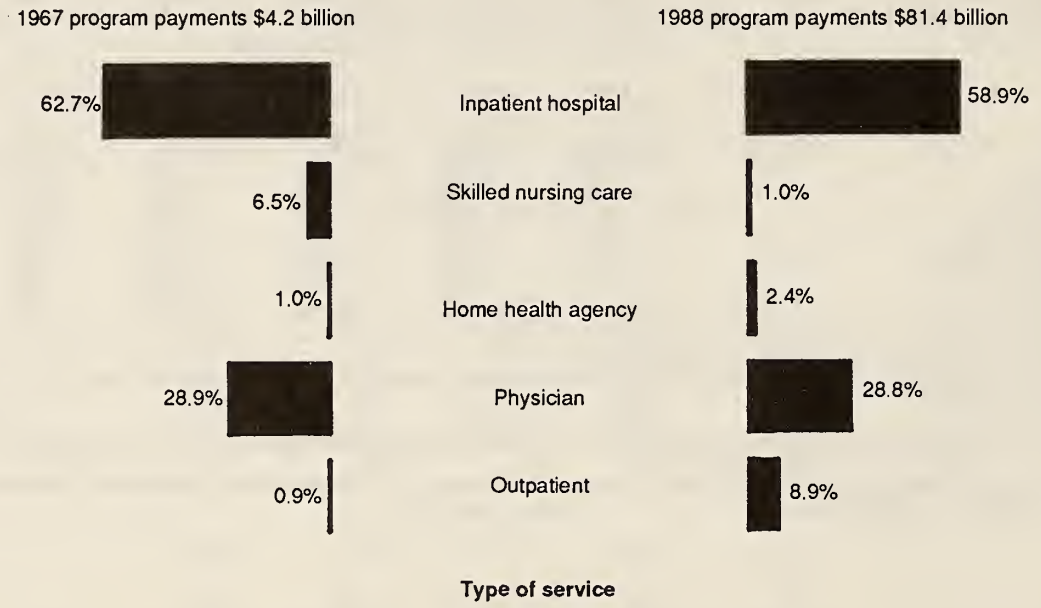
1/ Detail may not add to total because one person may have used several types of services.
2/ Prior to April 1, 1968, outpatient hospital services were covered by HI and SMI. All outpatient hospital services for 1987 are shown as SMI services for purposes of comparison. HI and SMI total, however, include services paid under their respective trust funds.

NOTE: Because the data in this report were derived from different statistical databases, the utilization and payment data shown in this table may vary slightly from comparable data shown throughout this report.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Statistics and Data Management and the Office of Research and Demonstrations.

Figure 4

Percent distribution of Medicare program payments, by type of service: Calendar years 1967 and 1988



SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 15
Summary of the types of Part A and/or B services provided to Medicare beneficiaries, persons served, and amount and average of program payments, by total Part A and/or B program payments: Calendar year 1988

Total Part A and/or B program payments	Part A and/or B	Part A				Part B			
		Total	Inpatient	Skilled nursing facility	Home health agency Part A	Total	Physician	Outpatient	Home health agency Part B
				Number of persons served					
Total	25,017,760	6,713,080	6,388,020	384,060	1,578,880	24,859,300	24,212,600	14,118,880	31,540
$1 - 99	4,779,180	5,060	1,060	280	3,820	4,772,720	4,362,820	1,153,400	80
100 - 499	7,485,820	49,260	10,560	1,120	38,480	7,473,200	7,340,280	3,542,320	480
500 - 999	2,937,460	94,380	37,620	1,860	57,460	2,924,400	2,896,020	2,001,640	1,820
1,000 - 1,999	2,157,980	395,960	320,560	3,800	83,340	2,132,720	2,110,720	1,622,240	3,580
2,000 - 4,999	3,293,640	2,023,140	1,933,160	28,000	247,840	3,240,680	3,211,620	2,376,440	10,240
5,000 - 9,999	2,029,340	1,816,940	1,794,180	87,420	358,920	2,002,140	1,987,680	1,527,680	8,780
10,000 - 14,999	953,880	927,000	927,100	86,900	265,120	943,900	938,720	744,620	3,540
15,000 - 19,999	520,700	499,660	500,920	57,920	173,900	515,680	513,360	425,280	1,500
20,000 - 24,999	300,020	291,560	292,160	37,620	109,020	297,520	296,320	249,100	800
25,000 and more	559,740	555,100	556,120	79,140	240,980	556,340	555,060	476,160	720
				Amount of program payments in thousands					
Total	$81,403,366	$50,688,656	$47,924,707	$843,313	$1,920,636	$30,714,710	$23,455,054	$7,216,751	$42,904
$1 - 99	219,324	297	48	15	234	219,026	183,222	35,799	4
100 - 499	1,915,672	10,583	2,369	256	7,958	1,905,087	1,549,267	355,709	110
500 - 999	2,086,206	47,441	21,870	898	24,673	2,038,764	1,552,345	485,651	767
1,000 - 1,999	3,070,456	438,956	378,153	3,335	57,468	2,631,498	1,908,004	721,476	2,018
2,000 - 4,999	10,896,206	4,904,690	4,676,174	29,472	199,044	5,991,513	4,448,035	1,534,439	9,039
5,000 - 9,999	14,359,754	9,097,758	8,565,591	129,283	402,884	5,261,994	4,074,329	1,174,017	13,648
10,000 - 14,999	11,674,012	8,366,658	7,845,258	172,118	349,282	3,307,353	2,646,464	650,708	10,180
15,000 - 19,999	8,985,592	6,491,326	6,093,797	139,013	258,516	2,494,265	1,842,667	647,983	3,614
20,000 - 24,999	6,692,903	4,899,647	4,621,005	102,905	175,737	1,793,255	1,325,681	465,836	1,736
25,000 and more	21,503,270	16,430,278	15,720,435	266,012	443,831	5,071,948	3,925,035	1,145,125	1,781

See footnote at end of table.

Table 15—Continued
Summary of the types of Part A and/or B services provided to Medicare beneficiaries, persons served, and amount and average of program payments, by total Part A and/or B program payments: Calendar year 1988

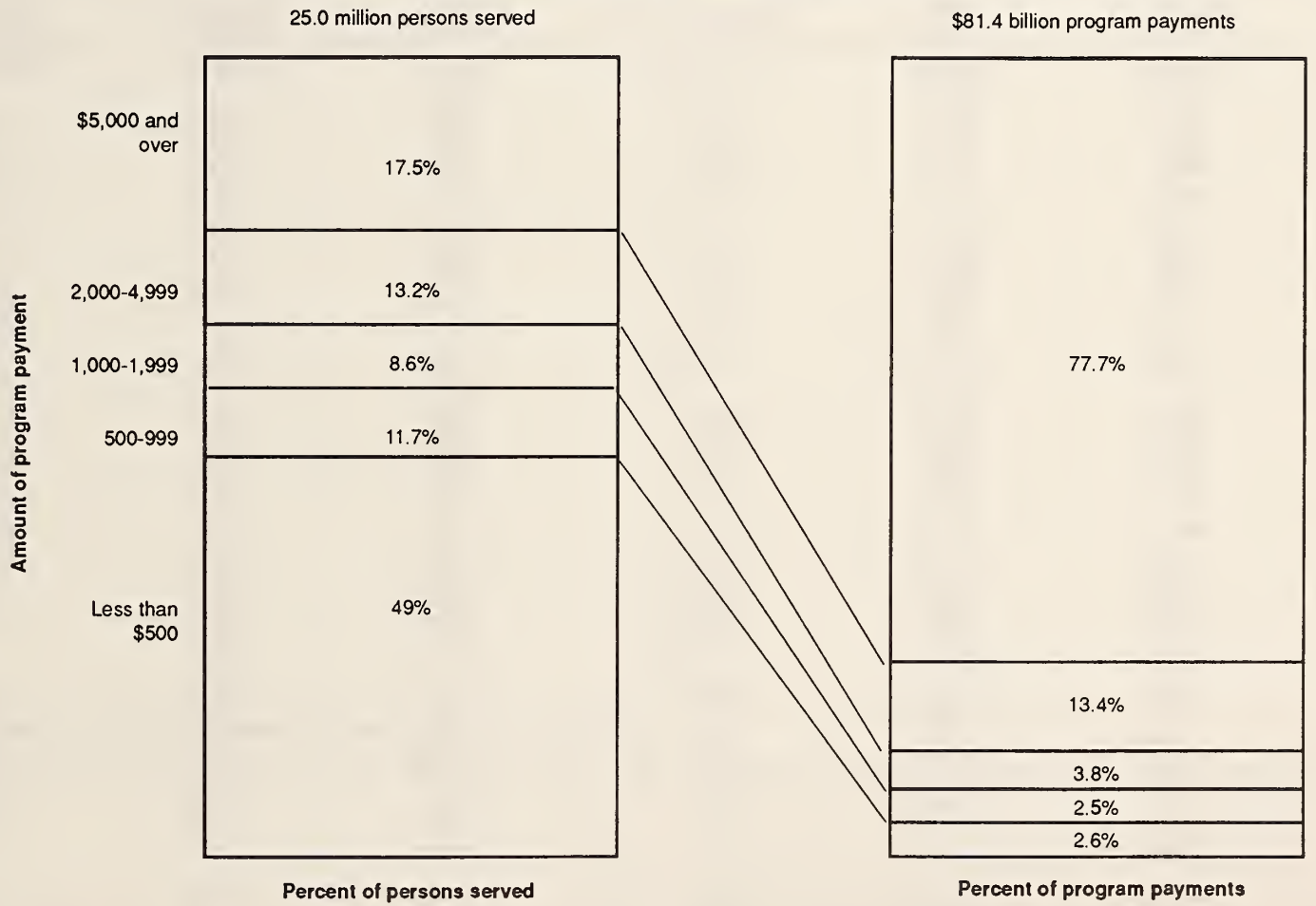
Total Part A and/or B program payments	Part A and/or B	Part A				Part B			
		Total	Inpatient	Skilled nursing facility	Home health agency Part A	Total	Physician	Outpatient	Home health agency Part B
		Average program payment per person served							
Total	$3,254	$7,551	$7,502	$2,196	$1,216	$1,236	$969	$511	$1,360
$1 - 99	46	59	45	54	61	46	42	31	50
100 - 499	256	215	224	229	207	255	211	100	229
500 - 999	710	503	581	483	429	697	536	243	421
1,000 - 1,999	1,423	1,109	1,180	878	690	1,234	904	445	564
2,000 - 4,999	3,308	2,424	2,419	1,053	803	1,849	1,385	646	883
5,000 - 9,999	7,076	5,007	4,774	1,479	1,122	2,628	2,050	768	1,554
10,000 - 14,999	12,238	9,026	8,462	1,981	1,317	3,504	2,819	874	2,876
15,000 - 19,999	17,257	12,991	12,165	2,400	1,487	4,837	3,589	1,524	2,409
20,000 - 24,999	22,308	16,805	15,817	2,735	1,612	6,027	4,474	1,870	2,170
25,000 and more	38,417	29,599	28,268	3,361	1,842	9,117	7,071	2,405	2,474

NOTE: Because the data in this report were derived from different statistical databases, the utilization and payment data shown in this table may vary slightly from comparable data shown throughout this report.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Figure 5

Percent distribution of Medicare persons served and program payments, by amount of program payment: Calendar year 1988



SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 16
Program payments for Medicare beneficiaries residing in urban and rural areas, by area of residence: Calendar year 1988

Area of residence 1/	Total program payments		Urban program payments		Rural program payments	
	Amount in millions	Per enrollee	Amount in millions	Per enrollee	Amount in millions	Per enrollee
United States	$80,994	$2,508	$62,642	$2,651	$18,352	$2,122
Northeast	19,968	2,738	18,103	3,120	1,865	2,291
North Central	19,564	2,389	13,939	2,610	5,624	1,975
South	26,841	2,442	18,494	2,604	8,347	2,146
West	14,621	2,521	12,099	2,572	2,522	2,300
New England	4,439	2,407	3,893	2,451	545	2,134
Connecticut	1,123	2,462	1,089	2,462	34	2,440
Maine	391	2,202	220	2,214	171	2,187
Massachusetts	2,214	2,603	2,079	2,618	135	2,392
New Hampshire	261	1,974	174	2,017	87	1,894
Rhode Island	303	1,951	303	1,951	—	—
Vermont	147	2,029	28	2,533	119	1,938
Middle Atlantic	15,529	2,850	14,209	2,906	1,320	2,363
New Jersey	2,852	2,674	2,852	2,674	—	—
New York	7,110	2,867	6,562	2,946	549	2,170
Pennsylvania	5,567	2,927	4,803	3,009	764	2,499
East North Central	14,318	2,551	11,281	2,731	3,038	2,050
Illinois	3,913	2,609	3,186	2,773	727	2,072
Indiana	1,633	2,216	1,134	2,360	499	1,947
Michigan	3,392	2,851	2,756	3,046	636	2,232
Ohio	3,885	2,605	3,195	2,729	690	2,151
Wisconsin	1,496	2,154	1,010	2,372	486	1,808
West North Central	5,245	2,037	2,658	2,198	2,587	1,894
Iowa	900	2,006	356	2,238	544	1,879
Kansas	754	2,123	340	2,293	415	2,002
Minnesota	915	1,598	483	1,529	432	1,684
Missouri	1,838	2,414	1,199	2,653	639	2,065
Nebraska	422	1,810	173	2,062	250	1,669
North Dakota	214	2,216	61	2,232	153	2,210
South Dakota	202	1,873	48	2,010	154	1,834
South Atlantic	14,373	2,467	10,895	2,620	3,479	2,087
Delaware	195	2,331	124	2,368	72	2,269
District of Columbia	327	4,178	327	4,178	—	—
Florida	5,812	2,641	5,254	2,671	558	2,390
Georgia	1,719	2,458	1,043	2,656	676	2,205
Maryland	1,603	3,100	1,489	3,176	114	2,362
North Carolina	1,739	2,062	911	2,159	828	1,965
South Carolina	749	1,793	442	1,859	307	1,710
Virginia	1,608	2,344	1,054	2,450	554	2,167
West Virginia	622	2,072	251	2,292	370	1,945

See footnote at end of table.

Table 16—Continued
Program payments for Medicare beneficiaries residing in urban and rural areas, by area of residence: Calendar year 1988

Area of residence	Total program payments		Urban program payments		Rural program payments	
	Amount in millions	Per enrollee	Amount in millions	Per enrollee	Amount in millions	Per enrollee
East South Central	$4,738	$2,253	$2,509	$2,398	$2,229	$2,110
Alabama	1,111	1,974	709	2,069	402	1,827
Kentucky	1,197	2,313	570	2,590	628	2,109
Mississippi	798	2,234	207	2,473	591	2,161
Tennessee	1,632	2,453	1,024	2,557	608	2,296
West South Central	7,730	2,523	5,090	2,684	2,640	2,262
Arkansas	812	2,133	275	2,260	538	2,074
Louisiana	1,465	2,854	1,007	3,038	458	2,519
Oklahoma	1,041	2,380	543	2,546	498	2,222
Texas	4,411	2,547	3,265	2,655	1,146	2,283
Mountain	3,387	2,227	2,214	2,345	1,173	2,034
Arizona	1,150	2,491	887	2,555	263	2,297
Colorado	686	2,053	548	2,164	139	1,707
Idaho	251	1,988	47	2,150	204	1,954
Montana	235	2,087	57	2,257	178	2,037
Nevada	315	2,610	267	2,714	48	2,151
New Mexico	335	1,998	154	2,026	181	1,974
Utah	304	2,041	224	2,054	80	2,008
Wyoming	110	2,265	30	2,256	80	2,268
Pacific	11,234	2,625	9,884	2,630	1,350	2,594
Alaska	66	3,023	27	3,404	39	2,803
California	8,944	2,837	8,256	2,792	688	3,522
Hawaii	208	1,766	152	1,777	56	1,735
Oregon	720	1,786	435	1,674	285	1,991
Washington	1,296	2,219	1,013	2,261	283	2,080

1/ Data are for United States only. Refer to Glossary for definition of urban and rural classifications.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support system; data development by the Office of Research and Demonstrations.

IV. Summary of Medicare beneficiary cost-sharing liability

During 1988, the Medicare program and its beneficiaries paid a total of $97.7 billion (Table17) for covered Medicare health care services. The Medicare program paid about 83 percent ($81.4 billion) of the total Medicare expenditures (program payments plus beneficiary cost-sharing). For Part A, Medicare paid about 91 percent ($50.7 billion) of the total expenditures for covered services; for Part B, Medicare paid about 73 percent ($30.7 billion).

Of the total Medicare expenditures, the beneficiaries were liable for payment of 17 percent ($16.3 billion) in cost-sharing expenses (deductibles, coinsurance, and balance billing); about 9 percent ($5.0 billion) Part A expenses and 27 percent ($11.3 billion) Part B expenses. Enrollees who purchased Medigap insurance policies to supplement their Medicare insurance had smaller cost-sharing expenses, while enrollees who were dually eligible for Medicare and Medicaid benefits had no deductible or coinsurance cost-sharing expenses. Many enrollees, however, remained at risk for a substantial amount of out-of-pocket liabilities.

Medicare cost-sharing provisions

Both Part A and Part B of the Medicare program require the beneficiary to share the costs of the Medicare-covered health care services. Under Part A, the beneficiary is required to pay an inpatient hospital deductible for each benefit period. Part A beneficiaries are also required to pay coinsurance amounts for the 61st through the 90th day of hospitalization and for lifetime reserve days, based on a percentage of the inpatient hospital deductible.

The inpatient hospital deductible is formulated by modifying the previous year's deductible by the same percentage used to determine Medicare payments to PPS hospitals. The figure thus derived is rounded to the nearest multiple of $4. In 1988, the deductible was $540 per benefit period.

Under Part A, when inpatient hospital services are received for more than 60 days during a benefit period, the patient must pay a coinsurance amount for each day after the 60th and through the 90th day on which these services are furnished. The beneficiary must pay a larger coinsurance amount for each day after the 90th day and through the 150th day—days that are chargeable against the individual's lifetime reserve of 60 days for inpatient hospital services. These inpatient hospital coinsurance amounts are defined by law as equal to one-fourth and one-half, respectively, of the inpatient hospital deductible, as annually adjusted. For example, in 1988, the beneficiary paid an amount equal to:

- One-fourth of the annual hospital deductible ($135) for the 30 coinsurance days of inpatient hospital care.
- One-half the annual hospital deductible ($270 in 1988) for the 60 nonrenewable lifetime reserve days for inpatient hospital care.
- For Part A inpatient skilled nursing facility (SNF) care services, the coinsurance amount is equal to one-eighth of the annual hospital deductible ($67.50) for the 80 coinsurance days (21st through the 100th day) of SNF care.

Under Part B, in addition to paying a monthly premium ($24.80 in 1988), the beneficiary must pay an annual Part B deductible, a 20-percent coinsurance for physician and physician-related services, and balance billing for unassigned physician/supplier claims.

- The Omnibus Budget Reconciliation Act of 1981 (Public Law 97-35) raised the Part B deductible from $60 to $75, effective January 1, 1982. Until the annual deductible is met, the beneficiary is responsible for 100-percent of all allowed charges for physician and physician-related services.

Table 17

Amounts and percents of total Medicare expenditures, Medicare program payments, and beneficiary cost-sharing liability: Calendar year 1988

	Total Medicare expenditures		Medicare program payments		Beneficiary cost-sharing liability 1/	
	Amount in billions	Percent	Amount in billions	Percent	Amount in billions	Percent
Total	$97.7	100.0	$81.4	83.3	$16.3	16.7
Part A	55.7	100.0	50.7	91.0	5.0	9.0
Part B	42.0	100.0	30.7	73.1	11.3	26.9

1/ Includes Part B balance billing beneficiary liability.

SOURCE: Health Care Financing Administration, Bureau of Data Managment and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

- Medicare reimburses 80 percent of the allowed charge (after the beneficiary has met the annual deductible), and the beneficiary is responsible for the 20-percent coinsurance amount required by law.
- The beneficiary also may be liable for physician charges resulting from balance billing on unassigned claims; that is, the beneficiary is responsible for paying the physician the difference between the physician's submitted charge and the Medicare allowed charge on unassigned claims.

The Deficit Reduction Act (DEFRA) of 1984 established the "Medicare participating physicians and suppliers" program (MPP). Under MPP, physicians and suppliers are encouraged to sign a participation agreement with Medicare binding them to accept assignment for all services provided to Medicare patients for the following year. Physicians who accept assignment for all Medicare services provided during a particular year agree to accept the Medicare allowed charge as payment in full. A physician or supplier who does not choose to participate in this program (non-participating physicians or suppliers) may still continue to accept assignment on a case-by-case basis. It should be noted that the Medicare allowed charges are frequently lower than the physician's submitted charges. Thus, the Medicare beneficiary may save a substantial amount of money by choosing a Medicare participating physician, or one that takes Medicare assignment, and thus avoid balance billing cost-sharing liability.

The DEFRA MPP has been very successful, with assignment rates (based on allowed charges) rising from 51 percent in 1983 to 78 percent in 1988. The ratio of submitted charges to allowed charges on unassigned claims, a measure of balance billing liability, increased from 1.31 in 1983 to 1.38 in 1985, but then dropped to 1.32 in 1988.

Table 18: Medicare beneficiary cost-sharing amounts, 1966-88

- The Medicare hospital insurance (HI) inpatient hospital deductible amount rose by nearly 14 times from 1966 through 1988, rising from $40 to $540.
- The inpatient hospital coinsurance amount (payable for the 61st through the 90th day) remained at an amount equal to one-fourth of the annual inpatient hospital deductible. Thus, the beneficiary liability was $10 per day in 1966 and $135 per day in 1988.
- The beneficiary coinsurance amount for lifetime reserve (60 days) used for inpatient hospital care was $20 per day in 1968 and $270 per day in 1988, or one-half the annual inpatient hospital deductible.
- Beneficiary coinsurance payments for skilled nursing facility services (SNF) amounted to $5.00 per day in 1967 and $67.50 in 1988. Beginning in 1984, the beneficiary coinsurance was nearly equal to the per diem amount that Medicare paid for SNF services.
- The supplementary medical insurance (SMI) annual deductible increased from $50 (1967-72), to $60 (1973-81), and to $75 from 1982 onward. Medicare generally pays 80 percent of approved charges for SMI services. As of July 1982, no deductible or coinsurance was required for home health agency services.

Table 19: Trends in the types of cost-sharing liability for Medicare beneficiaries, amount of beneficiary liability, dollars per enrollee and percent change, and average annual rate of change: Calendar years 1977-88

- Beneficiary cost-sharing liabilities for all Medicare services (including balance billing) increased from $4.5 billion in 1977 to $16.3 billion in 1988, an average annual rate of growth (AARG) of 12.4 percent.
- Hospital insurance (HI) beneficiary cost-sharing rose from $1.1 billion in 1977 to $5.0 billion in 1988, an AARG of 14.9 percent; during the same period, supplementary medical insurance (SMI) beneficiary cost-sharing liability climbed from $3.4 billion to $11.3 billion, an AARG of 11.6 percent (Figure 6).
- SMI coinsurance, the largest component of beneficiary cost-sharing liability, increased from $1.5 billion to $7.6 billion from 1977 through 1988, an AARG of 16.3 percent.
- Beneficiary cost-sharing payments for the HI deductible rose from $844 million to $4.0 billion during the period 1977-88, representing an AARG of 15.2 percent.
- In contrast, there was relatively little change in the amounts paid by beneficiaries for the SMI deductible, which rose from $1.0 billion in 1977 to $1.9 billion in 1988, or a 5.4 percent AARG.
- The average total cost-sharing liability per enrollee (including balance billing) increased from $174 in 1977 to $495 in 1988; an increase of 184 percent.
- The largest relative increase in the average cost-sharing amount per enrollee during this period was recorded for Part B coinsurance (317 percent), which rose from $58 in 1977 to $242 in 1988. Similarly, the Part A deductible per enrollee increased from $32 to $124 (287 percent).

- In contrast, Part B balance billing liability per enrollee showed a decrease (38 percent) from 1984 ($92) to 1988 ($57), reflecting a substantial decline in the proportion of beneficiaries incurring a balance billing liability.

Table 20: Medicare beneficiary cost-sharing liability, by selected demographic characteristics: Calendar year 1988

- An estimated 25.0 million Medicare beneficiaries, or 76 percent of all Medicare enrollees, used reimbursed Medicare services and incurred cost-sharing liability (deductible and coinsurance) amounting to $14.5 billion, an average of $580 per beneficiary.
- Over three-fifths (15.1 million) of all beneficiaries with some cost-sharing liability were female; the average liability was $550 per beneficiary, or 12 percent less than that for males ($627).
- Medicare beneficiaries less than 65 years of age comprised 8.7 percent (2.2 million) of all beneficiaries with a cost-sharing liability, but accounted for 11.2 percent ($1.6 billion) of all cost-sharing expenditures ($14.5 billion). The average liability ($748) was about 33 percent higher than that for aged enrollees.
- The average cost-sharing liability for beneficiaries with an urban residence ($602) was about 13 percent higher than for beneficiaries residing in a rural area ($521).
- Because of the high costs associated with renal dialysis, the average cost-sharing liability for beneficiaries with end stage renal disease (ESRD) was significantly higher than for aged and disabled beneficiaries. The average liability for ESRD beneficiaries was $3,855, or over 6 times greater than for non-ESRD beneficiaries.

Table 21: Type of service within type of entitlement for Medicare beneficiaries using covered services, persons served and amount of cost-sharing liability, by amount of total Part A and/or Part B liability: Calendar year 1988

- In 1988, 6.3 million beneficiaries, or 25 percent of all persons served (25.0 million) received Part A covered services. Their Part A cost-sharing liability (deductible and coinsurance) amounted to $5.0 billion, or an estimated $793 per user.
- Nearly all (24.9 million) Medicare beneficiaries used Part B services and incurred cost-sharing liability (deductible, coinsurance, and balance billing) amounting to $11.3 billion, an average of $455 per user.
- By type of service, the average beneficiary cost-sharing liability ranged from a low of $131 per person served for outpatient services to a high of $1,873 per person served for skilled nursing facility services.
- Medicare beneficiaries with a $1,000 or more in cost-sharing liability accounted for about one-fifth (5.0 million) of all persons served, but comprised nearly two-thirds ($10.6 billion) of all cost-sharing liability ($16.3 billion).
- The average cost-sharing liability, by amount of liability, ranged from $86 for beneficiaries with less than $100 to $20,369 for beneficiaries with $15,000 or more in Part A and/or Part B liability.

Table 22; Number of Medicare enrollees, total expenditures, program payments, and beneficiary liabilities, by total amount of expenditures and type of coverage: Calendar year 1988

- In 1988, total Medicare expenditures (program payments plus beneficiary cost-sharing liability) amounted to ($97.8 billion).
- Hospital insurance (Part A) services accounted for 57 percent ($55.9 billion) of all Medicare expenditures, and supplementary medical insurance (Part B) services represented 43 percent ($42.0 billion) of all expenditures.
- Medicare program payments accounted for an estimated 83 percent ($81.5 billion) and beneficiary cost-sharing liability accounted for 17 percent ($16.3 billion) of all Medicare expenditures.
- No program expenditures were reported for 24 percent of all Medicare enrollees, an estimated 8.0 million persons. Another 10.1 million enrollees (31 percent) incurred total expenditures ranging from $1 to $499; the average expenditure was $241 per enrollee.
- In contrast, about 8.6 million (25 percent) of all Medicare enrollees incurred $2,000 or more in total expenditures; the average expenditure was $10,394 per enrollee.
- Beneficiaries with $15,000 or more in Medicare expenditures and representing only 5 percent of all enrollees accounted for 48 percent ($47.1 billion) of all expenditures and 51 percent ($41.6 billion) of program payments; the average expenditure was $27,845 per enrollee.

Table 23: Number of beneficiaries served under Medicare and amount of beneficiary cost-sharing liability, by total beneficiary cost-sharing liability: Calendar year 1988

- Total Medicare beneficiary cost-sharing liability reached $16.3 billion in 1988, with Part A liability totaling $5.0 billion (31 percent) and Part B liability (including balance billing) amounting to $11.3 billion (69 percent).
- For Part A cost-sharing liability, the inpatient hospital deductible and coinsurance accounted for an estimated 80 percent ($4.0 billion) and 20 percent ($1.0 billion), respectively, of the total liability ($5.0 billion).

- For Part B cost-sharing liability, the deductible accounted for only about 16 percent ($1.9 billion) of total liability ($11.3 billion).
- In contrast to Part A coinsurance, Part B coinsurance comprised 68 percent ($7.6 billion) of all Part B liability; balance billing represented 16 percent ($1.8 billion).
- By type of liability, the average cost-sharing liability per person served ranged from $75 for the Part B deductible to $3,107 for Part A coinsurance.
- By amount of liability, the average liability per person served ranged from $86 for beneficiaries with less than $100 in cost-sharing liability to $20,369 for beneficiaries with $15,000 or more in liability.

Table 24: Number of Medicare enrollees and percent distribution of beneficiary cost-sharing liability, by type and amount of liability: Calendar year 1988

- In 1988, Part B coinsurance accounted for about 47 percent ($7.7 billion) of all beneficiary cost-sharing liability ($16.3 billion).
- In contrast, Part A coinsurance accounted for only 6 percent ($1.0 billion) of all beneficiary liability (Figure 7).
- The Part A deductible represented 25 percent ($4.0 billion) of beneficiary liability, whereas the Part B deductible comprised only 11 percent ($1.8 billion) of the total liability.
- Balance billing also accounted for 11 percent ($1.8 billion) of beneficiary cost-sharing liability.

Table 25: Medicare beneficiary cost-sharing liability, by type of liability: Calendar years 1983 and 1988

- Beneficiary liability increased from $11.4 billion in 1983 to $16.3 billion in 1988, a rise of 43 percent. The average liability per enrollee during this period rose from $381 to $495, an increase of 30 percent.
- The largest percent increase in the average liability per enrollee (70 percent) from 1983-88 was recorded for Part B coinsurance, which rose from $142 to $242.
- As a proportion of the total liability, Part B coinsurance increased from 37 percent in 1983 to 47 percent in 1988.
- Similarly, there was a large increase (49 percent) during the period1983-88 in the average liability per enrollee for the inpatient deductible, which rose from $83 to $124, and the SNF coinsurance (67 percent), which went from $6 to $10.
- As a proportion of the total liability, the Part A inpatient deductible increased from 22 percent in 1983 to 25 percent in 1988.
- In contrast, the average balance billing liability per enrollee decreased from $83 in 1983 to $60 in 1988, a drop of 28 percent. (Note: The Deficit Reduction Act (DEFRA) of 1984 created the Medicare participating physician/supplier program. DEFRA resulted in a substantial increase in the rate of physician assigned claims, thus reducing balance billing liability on unassigned claims).

Table 26: Number of Medicare beneficiaries incurring Part A inpatient hospital deductibles, number of deductibles, and deductible liability, by number of Part A deductibles: Calendar year 1988

- During 1988, approximately 6.5 million beneficiaries were discharged from inpatient hospitals and incurred an estimated 7.5 million hospital insurance (HI) deductibles, an average of 1.15 deductibles per person.
- The total HI deductible liability amounted to $4.0 billion, an average of $619 per person.
- An estimated 1.06 million Medicare beneficiaries, 16 percent of all persons discharged from inpatient hospitals, had two or more HI deductibles during 1988.
- Beneficiaries with two or more deductibles in 1988 had a total of 2.24 million HI deductibles and incurred deductible liability amounting to $1.20 billion. The average HI deductible liability was $1,139 per person.

Table 27: Medicare beneficiaries incurring hospital inpatient coinsurance liability for coinsurance and/or lifetime reserve days, by number of covered days of care: Calendar year 1988

- During 1988, an estimated 164,660 persons discharged from inpatient hospitals incurred $671 million in beneficiary coinsurance and lifetime reserve cost-sharing liability, an average of $4,075 per person.
- These beneficiaries accounted for only about 3 percent of all persons (6.47 million) discharged from inpatient hospitals during 1988.

- About 17 percent (27,400) of beneficiaries with coinsurance and/or lifetime reserve days had less than 61 covered days of care during 1988. The average liability for these beneficiaries was $2,149 per person. (Note: This cohort represents beneficiaries discharged during 1988 in a benefit period that began in the previous year).
- Conversely, about 34 percent (56,100) of the beneficiaries with cost-sharing days had more than 90 covered days of care during the year. Their average liability was $8,059 per person.

Table 28: Persons served, persons with coinsurance days, coinsurance days, and beneficiary coinsurance liability for skilled nursing facility services used by Medicare beneficiaries, by covered days of care: Calendar year 1988

- During 1988, 375,354 persons (6 percent of all persons discharged from inpatient hospitals) used skilled nursing facility (SNF) services.
- An estimated 47 percent (177,023) of all SNF users incurred coinsurance liability amounting to about $333.9 million, an average of $1,886 per person.
- These persons used 5.1 million SNF coinsurance days, an average of 28.9 days per person.
- Approximately 54 percent (203,275) of the SNF beneficiaries had less than 21 covered days of care during 1988. An estimated 4 percent (7,820) of these beneficiaries incurred coinsurance days during 1988. (Note: This cohort represents beneficiaries admitted during 1988 in a benefit period that began in the previous year).
- Conversely, about 9 percent (33,714) of the persons with SNF services had 90 or more covered days of care during the year. The average coinsurance liability for these beneficiaries was $4,536 per person.

Table 29: Number of Part B users and balance billing liability for Medicare beneficiaries, by amount of balance billing liability: Calendar year 1988

- Of the total Part B user population in 1988 (26.3 million), an estimated 13.5 million persons (51 percent) had some balance billing liability during 1988; the total liability amounted to $1.9 billion, an average of $140 per person.
- An estimated 86 percent (11.7 million) of all Part B users with balance billing liability (13.5 million) in 1988 incurred less than $250 in balance billing liability, an average liability of $49 per person.
- In contrast, 1 percent (347,100) of the beneficiaries with balance billing liability of $1,000 or more accounted for nearly 33 percent ($623 million) of the total balance billing liability; their average liability was $1,796 per person.
- A simulated balance billing cap (See NOTE below) of 109.25 percent in 1988 would have saved Medicare beneficiaries about $1.2 billion in balance billing liability. That is, the total balance billing liability would have amounted to $0.7 billion instead of$1.9 billion.
- NOTE: The Omnibus Reconciliation Act of 1989 mandated a 9.25 percent limit on the amount a nonparticipating physician could charge over the reduced Medicare fee schedule amount on unassigned physician claims.

Table 18
Medicare beneficiary cost-sharing amounts, 1966-88

	Hospital insurance					Supplementary medical insurance		
	Covers all expenses in benefit period except							
		Inpatient hospital daily coinsurance						
Year	Inpatient hospital deductible (IHD) covers first 60 days	61st through 90th days (1/4 x IHD)	Lifetime reserve days after 90 days (1/2 x IHD)	Skilled nursing facility daily coinsurance after 20 days (1/8 x IHD)	Monthly premium 1/	Annual deductible	Coinsurance	Monthly premium
July 1966	$40	$10	2/	2/	-	$50	20%	$3.00
1967	-	-	2/	$5.00	-	-	-	-
1968	-	-	$20	-	-	-	-	-
April 1968	-	-	-	-	-	3/	3/	4.00
1969	44	11	22	5.50	-	-	-	-
1970	52	13	26	6.50	-	-	-	5.30
1971	60	15	30	7.50	-	-	-	5.60
1972	68	17	34	8.50	-	-	-	5.80
1973	72	18	36	9.00	$33	$60 4/	4/ 5/	6.10
1974	84	21	42	10.50	36	-	-	6.30
1975	92	23	46	11.50	40	-	-	6.70
1976	104	26	52	13.00	45	-	-	7.20
1977	124	31	62	15.50	54	-	-	7.70
1978	144	36	72	18.00	63	-	-	8.20
1979	160	40	80	20.00	69	-	-	8.70
1980	180	45	90	22.50	78	-	-	9.60
1981	204	51	102	25.50	89	6/ 7/	7/	11.00
1982	260	65	130	32.50	113	$75	8/	12.20
1983	304	76	152	38.00	113	-	-	12.20
1984	356	89	178	44.50	155	-	-	14.60
1985	400	100	200	50.00	174	-	-	15.50
1986	492	123	246	61.50	214	-	-	15.50
1987	520	130	260	65.00	226	-	-	17.90
1988	540	135	270	67.50	234	-	-	24.80

1/ Enrollees not eligible for social security benefits must pay a monthly premium for hospital insurance.
2/ Benefit not provided.
3/ Professional inpatient services of pathologists and radiologists not subject to deductible or coinsurance.
4/ Beginning in January for current and succeeding years.
5/ Home health services not subject to coinsurance.
6/ Home health services not subject to deductible.
7/ Same as footnote 2, but only when physician accepts assignment.
8/ Effective October 1, 1982, professional inpatient services of pathologists and radiologists are subject to coinsurance and deductible.

NOTE: Year beginning January unless otherwise noted.

SOURCE: Health Care Financing Administration: Data are from the Office of the Actuary.

Table 19

Trends in the types of cost-sharing liability for Medicare beneficiaries, amount of beneficiary liability, dollars per enrollee and percent change, and average annual rate of change: Calendar years 1977-88

Calendar year	Total Part A and/or Part B	Part A				Part B			
		Total	Inpatient hospital		Skilled nursing facility coinsurance	Total	Deductible	Coinsurance	Balance billing 1/
			Deductible	Coinsurance					
		Amount of beneficiary liability in millions							
1977	$4,489	$1,091	$844	$171	$76	$3,398	$1,049	$1,454	$804
1978	5,046	1,311	1,019	210	82	3,735	1,102	1,723	910
1979	5,898	1,512	1,168	257	87	4,386	1,157	2,072	1,157
1980	7,074	1,807	1,395	312	100	5,267	1,207	2,519	1,541
1981	8,433	2,080	1,615	355	110	6,353	1,358	3,042	1,953
1982	10,388	2,804	2,131	524	149	7,584	1,574	3,730	2,280
1983	11,965	3,302	2,540	584	178	8,663	1,690	4,463	2,510
1984	12,833	3,526	2,870	450	206	9,307	1,763	4,824	2,720
1985	13,523	3,774	3,048	493	233	9,749	1,850	5,297	2,600
1986	14,590	4,189	3,569	408	212	10,401	1,704	6,002	2,695
1987	15,655	4,586	3,818	568	200	11,070	1,796	7,073	2,201
1988	16,315	5,006	4,004	671	331	11,309	1,864	7,649	1,795
		Dollars per enrollee 2/							
1977	$174	$42	$32	$7	$3	$132	$42	$58	$32
1978	192	49	38	8	3	143	42	66	35
1979	219	55	43	9	3	164	43	78	43
1980	256	64	50	11	4	192	44	92	56
1981	301	73	56	12	4	228	49	109	70
1982	364	96	73	18	5	268	56	32	80
1983	413	112	86	20	6	301	59	155	87
1984	434	118	96	15	7	316	60	164	92
1985	448	123	101	16	8	325	62	177	87
1986	460	134	114	13	7	340	56	196	88
1987	483	144	120	18	6	355	58	227	71
1988	495	154	124	21	10	358	59	242	57

See footnotes at end of table.

Table 19—Continued

Trends in the types of cost-sharing liability for Medicare beneficiaries, amount of beneficiary liability, dollars per enrollee and percent change, and average annual rate of change: Calendar years 1977-88

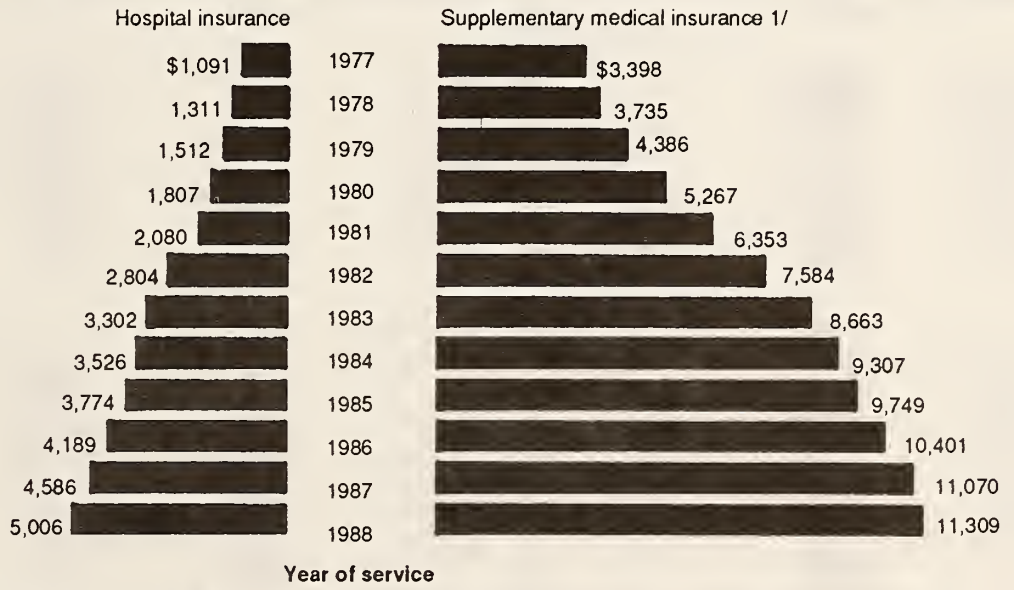
Calendar year	Total Part A and/or Part B	Part A				Part B			
		Total	Inpatient hospital		Skilled nursing facility coinsurance	Total	Deductible	Coinsurance	Balance billing 1/
			Deductible	Coinsurance					
		Percent change in dollars per enrollee 2/							
1977-78	10	17	19	14	0	8	0	14	9
1978-79	14	12	13	13	0	15	2	18	23
1979-80	17	16	16	22	33	17	2	18	30
1980-81	18	14	12	9	0	19	11	19	25
1981-82	21	32	30	50	25	18	14	-71	14
1982-83	14	17	18	11	20	12	5	84	9
1983-84	5	5	12	-25	17	5	2	6	6
1984-85	3	4	5	7	14	3	3	8	-5
1985-86	3	9	13	-19	-13	5	-10	11	1
1986-87	5	8	5	39	-14	4	4	16	-19
1987-88	3	7	3	17	67	1	2	7	-20
		Average annual rate of change							
1977-88	12.4	14.9	15.2	13.2	14.3	11.6	5.4	16.3	7.6

1/ Balance billing on unassigned claims is the difference between the charge submitted by the physician and the charge allowed by Medicare. The beneficiary is liable for this difference, in addition to the 20-percent coinsurance set by law.
2/ All Medicare enrollees have been included in the calculations although not all enrollees used Medicare-covered services. Beneficiaries are defined as Medicare enrollees who used Medicare-covered services.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System: data development by the Office of Research and Demonstrations.

Figure 6

Total cost-sharing liability (in millions) for Medicare beneficiaries, by type of coverage: Calendar years 1977-88



1/ Includes Part B balance billing on physician/supplier unassigned claims.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 20

Medicare beneficiary cost-sharing liability, by selected demographic characteristics: Calendar year 1988

Demographic characteristic	Number of beneficiaries in thousands	Percent	Cost-sharing liability		
			Amount in millions 1/	Percent	Average amount per beneficiary
Total	25,018	100	$14,520	100	$580
Sex					
Male	9,890	40	6,200	43	627
Female	15,128	60	8,320	57	550
Age					
Less than 65 years	2,178	9	1,630	11	748
65-74 years	12,362	49	6,256	43	506
75-84 years	7,816	31	4,844	33	620
85 years and over	2,662	11	1,789	12	672
Race					
White	21,808	87	12,471	86	572
Nonwhite	3,210	13	2,049	14	638
Region					
Northeast	5,774	23	3,544	24	614
North Central	6,300	25	3,458	24	549
South	8,530	34	4,915	34	576
West	4,413	18	2,603	18	590
MSA 2/					
Urban	18,174	73	10,948	75	602
Rural	6,844	27	3,571	25	521
Type of enrollment					
Aged	22,810	91	12,751	88	559
Disabled	2,090	8	1,314	9	629
ESRD 3/	118	(4/)	455	3	3,855

1/ Excludes beneficiary balance billing cost-sharing liability.
2/ MSA denotes metropolitan statistical area. Refer to Glossary for definition of urban and rural classifications.
3/ ESRD denotes end stage renal disease.
4/ Less than 0.005 percent.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 21

Type of service within type of entitlement for Medicare beneficiaries using covered services, persons served and amount of cost-sharing liability, by amount of total Part A and/or Part B liability: Calendar year 1988

Amount of total Part A and /or Part B liability	Part A and/or Part B	Part A			Part B		
		Total	Inpatient	Skilled nursing facility	Total	Physician	Outpatient
				Number of persons served 1/			
Total	24,988,120	6,310,240	6,301,260	176,960	24,863,520	24,241,140	14,036,480
$1-99	3,954,080	360	360	0	3,953,740	3,553,460	999,640
100-499	12,358,340	11,620	11,180	460	12,356,520	12,193,960	6,555,740
500-999	3,723,780	2,128,600	2,127,120	4,500	3,615,920	3,573,760	2,443,720
1,000-1999	3,279,520	2,639,300	2,636,700	34,320	3,267,120	3,253,000	2,582,380
2,000-4,999	1,430,220	1,303,420	1,300,600	82,200	1,428,780	1,426,460	1,239,280
5,000-9,999	202,720	188,400	186,780	47,540	202,240	201,680	182,140
10,000-14,999	22,340	21,600	21,580	4,780	22,300	22,200	19,340
15,000 and over	17,120	16,940	16,940	3,160	16,900	16,620	14,240
				Amount of cost-sharing liability in thousands 2/			
Total	$16,314,839	$5,006,253	$4,674,721	$331,531	$11,308,585	$9,462,884	$1,845,701
$1-99	339,848	21	21	0	339,827	301,726	38,101
100-499	2,554,991	2,009	1,925	83	2,552,982	2,226,906	326,076
500-999	2,812,796	1,144,462	1,143,522	940	1,668,334	1,373,304	295,030
1,000-1999	4,562,254	1,664,086	1,651,232	12,854	2,898,168	2,451,112	447,055
2,000-4,999	4,102,348	1,248,997	1,144,657	104,340	2,853,350	2,387,676	465,674
5,000-9,999	1,326,195	511,557	326,401	185,156	814,638	574,263	240,375
10,000-14,999	267,679	154,722	136,343	18,378	112,956	90,779	22,177
15,000 and over	348,723	280,396	270,617	9,778	68,327	57,117	11,210
				Average liability per person served			
Total	$653	$793	$742	$1,873	$455	$390	$131
$1-99	86	60	60	0	86	85	38
100-499	207	173	172	181	207	183	50
500-999	755	538	538	209	461	384	121
1,000-1999	1,391	631	626	375	887	753	173
2,000-4,999	2,868	958	880	1,269	1,997	1,674	376
5,000-9,999	6,542	2,715	1,748	3,895	4,028	2,847	1,320
10,000-14,999	11,982	7,163	6,318	3,845	5,065	4,089	1,147
15,000 and over	20,369	16,552	15,975	3,094	4,043	3,437	787

1/ Detail does not sum to total because one person may have used any of several services.
2/ Includes balance billing liability for physician services.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 22
Number of Medicare enrollees, total expenditures, program payments, and beneficiary liabilities, by total amount of expenditure and type of coverage: Calendar year 1988

Total amount of expenditure and type of coverage	Enrollees		Total expenditures		Medicare program payments		Beneficiary liabilities 1/	
	Number in thousands	Percent	Amount in millions	Percent	Amount in millions	Percent	Amount in millions	Percent
Part A and Part B								
Total	32,980	100.0	$97,823	100.0	$81,508	100.0	$16,315	100.0
$0	7,965	24.2	NA	NA	NA	NA	NA	NA
1 - 99	1,020	3.1	89	0.1	10	(2/)	79	0.5
100 - 499	9,053	27.5	2,336	2.4	1,251	1.5	1,085	6.7
500 - 999	3,758	11.4	2,668	2.7	1,815	2.2	853	5.2
1,000 - 1,999	2,618	7.9	3,680	3.8	2,661	3.3	1,019	6.2
2,000 - 4,999	3,338	10.1	11,302	11.6	8,623	10.6	2,679	16.4
5,000 - 9,999	2,446	7.4	17,245	17.6	14,120	17.3	3,125	19.2
10,000-14,999	1,090	3.3	13,360	13.7	11,453	14.1	1,908	11.7
15,000 and more	1,693	5.1	47,142	48.2	41,575	51.0	5,567	34.1
Part A								
Total	32,413	100.0	$55,861	100.0	$50,855	100.0	$5,006	100.0
$0	25,629	79.1	NA	NA	NA	NA	NA	NA
1 - 99	24	0.1	2	(2/)	2	(2/)	(3/)	(2/)
100 - 499	137	0.4	37	0.1	37	0.1	1	(2/)
500 - 999	172	0.5	116	0.2	65	0.1	51	1.0
1,000 - 1,999	534	1.6	864	1.5	607	1.2	258	5.2
2,000 - 4,999	2,521	7.8	8,383	15.0	7,017	13.8	1,366	27.3
5,000 - 9,999	1,657	5.1	11,884	21.3	10,786	21.2	1,098	21.9
10,000-14,999	776	2.4	9,472	17.0	8,834	17.4	637	12.7
15,000 and more	963	3.0	25,104	44.9	23,508	46.2	1,596	31.9
Part B								
Total	31,617	100.0	$41,962	100.0	$30,653	100.0	$11,309	100.0
$0	6,754	21.4	NA	NA	NA	NA	NA	NA
1 - 99	1,044	3.3	91	0.2	10	(2/)	81	0.7
100 - 499	9,544	30.2	2,490	5.9	1,337	4.4	1,153	10.2
500 - 999	4,486	14.2	3,215	7.7	2,194	7.2	1,020	9.0
1,000 - 1,999	3,854	12.2	5,489	13.1	3,982	13.0	1,506	13.3
2,000 - 4,999	3,952	12.5	12,636	30.1	9,433	30.8	3,203	28.3
5,000 - 9,999	1,497	4.7	10,191	24.3	7,687	25.1	2,504	22.1
10,000-14,999	301	1.0	3,592	8.6	2,709	8.8	884	7.8
15,000 and more	187	0.6	4,259	10.1	3,301	10.8	958	8.5

1/ Includes Part B beneficiary balance-billing liability for Part B physician unassigned claims. Balance billing on unassigned claims is the difference between the charge submitted by the physician and the charge allowed by Medicare.
2/ Less than 0.005 percent.
3/ Less than $500,000.

NOTE: NA denotes not applicable.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 23
Number of beneficiaries served under Medicare and amount of beneficiary cost-sharing liability, by total beneficiary cost-sharing liability: Calendar year 1988

Total beneficiary cost-sharing liability	Part A and/or Part B	Part A			Part B			
		Total	Deductible	Coinsurance	Total	Deductible	Coinsurance	Balance billing
				Number of persons served				
Total	24,988,120	6,310,240	6,267,880	322,660	24,863,520	24,859,040	24,720,860	11,816,060
$1-99	3,954,080	360	360	0	3,953,740	3,953,500	3,824,200	545,820
100-499	12,358,340	11,620	10,560	1,080	12,356,520	12,356,480	12,350,160	6,232,060
500-999	3,723,780	2,128,600	2,125,320	6,680	3,615,920	3,612,000	3,609,660	1,856,600
1,000-1,999	3,279,520	2,639,300	2,631,640	46,120	3,267,120	3,266,900	3,266,720	2,023,460
2,000-4,999	1,430,220	1,303,420	1,288,280	141,560	1,428,780	1,428,720	1,428,700	1,009,120
5,000-9,999	202,720	188,400	179,600	93,380	202,240	202,240	202,240	128,180
10,000-14,999	22,340	21,600	18,700	17,520	22,300	22,300	22,300	12,540
15,000 & over	17,120	16,940	13,420	16,320	16,900	16,900	16,880	8,280
				Amount of cost-sharing liability in thousands 1/				
Total	$16,314,839	$5,006,253	$4,003,598	$1,002,655	$11,308,586	$1,864,428	$7,649,037	$1,795,121
$1-99	339,849	21	211	0	339,827	296,513	39,385	3,929
100-499	2,554,992	2,009	1,797	212	2,552,982	926,736	1,356,530	269,717
500-999	2,812,797	1,144,463	1,142,720	1,743	1,668,334	270,900	1,200,654	196,780
1,000-1,999	4,562,254	1,664,086	1,643,878	20,209	2,898,168	245,018	2,199,616	453,534
2,000-4,999	4,102,349	1,248,998	1,047,634	201,364	2,853,351	107,154	2,098,507	647,690
5,000-9,999	1,326,196	511,557	144,454	367,103	814,639	15,168	616,469	183,001
10,000-14,999	267,679	154,722	14,291	140,431	112,957	1,673	84,878	26,406
15,000 & over	348,724	280,396	8,803	271,593	68,328	1,268	52,997	14,063
				Average liability per person served				
Total	$653	$793	$639	$3,107	$455	$75	$309	$152
$1-99	86	58	586	0	86	75	10	7
100-499	207	173	170	196	207	75	110	43
500-999	755	538	538	261	461	75	333	106
1,000-1,999	1,391	631	625	438	887	75	673	224
2,000-4,999	2,868	958	813	1,422	1,997	75	1,469	642
5,000-9,999	6,542	2,715	804	3,931	4,028	75	3,048	1,428
10,000-14,999	11,982	7,163	764	8,015	5,065	75	3,806	2,106
15,000 & over	20,369	16,552	656	16,642	4,043	75	3,140	1,698

1/ Includes Part B beneficiary balance-billing liability for Part B physician unassigned claims. Balance billing on unassigned claims is the difference between the charge submitted by the physician and the charge allowed by Medicare.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 24

Number of Medicare enrollees and percent distribution of beneficiary cost-sharing liability, by type and amount of liability: Calendar year 1988

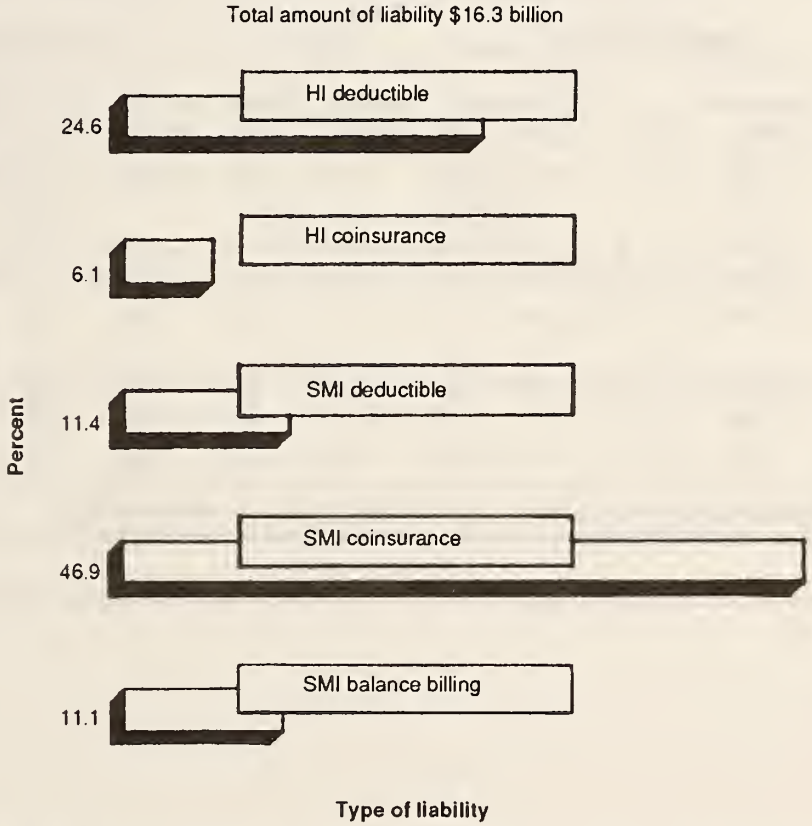
Total beneficiary cost-sharing liability	All enrollees		Total beneficiary cost-sharing liabilities 1/		Percent distribution of beneficiary cost-sharing liabilities						
						Part A liability			Part B liability		
	Number in thousands	Percent	Amount in millions	Percent	Total Part A and Part B	Inpatient deductible	Inpatient coinsurance	SNF coinsurance	Deduct-ible	Coin-surance	Balance billing
Total	32,980	100.0	$16,315	100.0	100.0	24.5	4.1	2.0	11.4	46.9	11.0
$0	7,992	24.2	NA	NA	NA	NA	NA	NA	NA	NA	NA
1 - 99	3,954	12.0	340	2.1	100.0	0.0	0.0	0.0	87.2	11.6	1.2
100 - 299	10,159	30.8	1,717	10.5	100.0	0.0	0.0	0.0	44.4	46.3	9.3
300 - 499	2,199	6.7	838	5.1	100.0	0.2	0.0	0.0	19.7	67.1	13.0
500 - 699	1,341	4.1	809	5.0	100.0	30.6	0.0	0.0	11.4	49.0	8.9
700 - 999	2,383	7.2	2,003	12.3	100.0	44.7	0.0	0.0	8.9	40.1	6.2
1,000 - 1,999	3,280	9.9	4,562	28.0	100.0	36.0	0.2	0.3	5.4	48.2	9.9
2,000 - 4,999	1,430	4.3	4,102	25.1	100.0	25.5	2.4	2.5	2.6	51.2	15.8
5,000 and more	242	0.7	1,943	11.9	100.0	8.6	29.1	11.0	0.9	38.8	11.5

NOTE: NA denotes not applicable.

1/ Includes Part B beneficiary balance-billing liability for Part B physician unassigned claims. Balance billing on unassigned claims is the difference between the charge submitted by the physician and the charge allowed by Medicare.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Figure 7
Composition of Medicare beneficiary cost-sharing liability, 1988



SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 25

Medicare beneficiary cost-sharing liability, by type of liability: Calendar years 1983 and 1988

Type of liability	1983						1988						Percent change 1983-88		
	Persons incurring liability 1/		Cost-sharing liability				Persons incurring liability 1/		Cost-sharing liability						
	Number in thousands	Percent of total	Amount in millions	Percent	Per person served	Per enrollee	Number in thousands	Percent of total	Amount in millions	Percent	Per person served	Per enrollee	Amount	Per person	Per enrollee
Total	19,567	100.0	$11,448	100.0	$585	$381	24,988	100.0	$16,315	100.0	$653	$495	42.5	11.6	29.9
Part A															
Inpatient deductible	6,870	35.1	2,504	21.9	364	83	6,415	25.7	4,004	24.5	620	124	59.9	70.3	49.4
Inpatient coinsurance	242	1.2	561	4.9	2,318	19	165	0.7	671	4.1	4,075	21	19.6	75.8	10.5
Skilled nursing facility coinsurance	147	0.8	185	1.6	1,259	6	177	0.7	331	2.0	1,873	10	78.9	48.8	66.7
Part B															
Deductible	19,375	99.0	1,453	12.7	75	48	24,859	99.5	1,864	11.4	75	59	28.3	0.0	22.9
Coinsurance	19,193	98.1	4,260	37.2	222	142	24,721	98.9	7,649	46.9	309	242	79.6	39.2	70.4
Physician balance billing 2/	13,856	70.8	2,485	21.7	179	83	11,816	47.3	1,895	11.6	152	60	-23.7	-15.1	-27.7

1/ The figures in these columns are not additive since a beneficiary (person served) could incur one or more types of beneficiary cost-sharing liability.
2/ Physician balance billing is the difference between the physician's submitted charge and the Medicare allowed (approved) charge on unassigned claims. The beneficiary is liable for this difference, in addition to the 20-percent coinsurance amount set by law.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 26

Number of Medicare beneficiaries incurring Part A inpatient hospital deductibles, number of deductibles, and deductible liability, by number of Part A deductibles: Calendar year 1988

Number of Part A deductibles	Persons		Number of deductibles		Deductible liability	
	Number	Percent	Number	Percent	Amount in thousands	Percent
Total	6,465,000	100.0	7,452,980	100.0	$4,003,588	100.0
No deductible 1/	197,220	3.1	NA	NA	NA	NA
1 deductible	5,211,380	80.6	5,211,380	69.9	2,800,077	69.9
2 deductibles	934,600	14.5	1,869,200	25.1	1,003,783	25.1
3 or more deductibles	121,800	1.9	372,400	5.0	199,727	5.0

1/ Represents beneficiaries who were discharged from inpatient hospitals during calendar year 1988, but who were admitted for that stay and paid the deductible amount for that stay during the previous calendar year.

NOTE: NA denotes not applicable.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 27

Medicare beneficiaries incurring hospital inpatient coinsurance liability for coinsurance and/or lifetime reserve days, by number of covered days of care: Calendar year 1988

Number of covered days of care 1/	Total number of persons served	Beneficiaries incurring hospital inpatient liability for coinsurance and/or lifetime reserve days					
		Persons served		Coinsurance days		Coinsurance liability	
		Number	Percent	Number	Per person	Amount in thousands	Per person
Total	6,472,320	164,660	2.5	3,884,920	23.6	$671,065	$4,075
1-10 days	3,735,040	2,400	0.1	12,300	5.1	2,171	905
11-20 days	1,423,900	3,660	0.3	35,460	9.7	5,894	1,610
21-30 days	572,340	4,100	0.7	50,720	12.4	8,137	1,985
31-40 days	289,560	5,520	1.9	82,200	14.9	13,830	2,505
41-50 days	161,440	5,060	3.1	69,540	13.7	11,384	2,250
51-60 days	96,280	6,660	6.9	106,160	15.9	17,467	2,623
61-70 days	60,220	35,160	58.4	261,440	7.4	38,417	1,093
71-80 days	38,300	26,460	69.1	409,740	15.5	59,266	2,240
81-90 days	25,040	19,540	78.0	437,140	22.4	62,394	3,193
91-150 days	51,500	43,380	84.2	1,678,480	38.7	300,430	6,926
151 days or more 2/	18,700	12,720	68.0	741,740	58.3	151,676	11,924

1/ Covered days of care reflect beneficiaries with one or more stays during the year.
2/ Covered days of care reflect beneficiaries with more than one benefit period.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 28

Persons served, persons with coinsurance days, coinsurance days, and beneficiary coinsurance liability for skilled nursing facility services used by Medicare beneficiaries, by covered days of care: Calendar year 1988

Covered days of care 1/	Persons served		Persons with coinsurance days		Coinsurance days			Beneficiary coinsurance liability		
	Number	Percent	Number	Percent	Number	Percent	Per person	Amount	Percent	Per person
Total	375,354	100.0	177,023	100.0	5,114,443	100.0	28.9	$333,939,456	100.0	$1,886
1-8 days	84,926	22.6	2,070	1.2	8,129	0.2	3.9	390,030	0.1	188
9-20 days	118,349	31.5	5,750	3.2	44,897	0.9	7.8	2,070,889	0.6	360
21-30 days	52,447	14.0	50,627	28.6	276,432	5.4	5.5	17,672,738	5.3	349
31-40 days	29,633	7.9	28,911	16.3	425,564	8.3	14.7	27,751,903	8.3	960
41-50 days	19,283	5.1	19,157	10.8	449,935	8.8	23.5	29,486,507	8.8	1,539
51-60 days	13,347	3.6	13,282	7.5	429,998	8.4	32.4	28,235,078	8.5	2,126
61-70 days	10,215	2.7	10,168	5.7	423,788	8.3	41.7	27,937,951	8.4	2,748
71-80 days	7,411	2.0	7,393	4.2	371,762	7.3	50.3	24,522,695	7.3	3,317
81-90 days	6,029	1.6	6,013	3.4	348,198	6.8	57.9	22,950,747	6.9	3,817
91-100 days	23,005	6.1	22,987	13.0	1,759,916	34.4	76.6	117,341,177	35.1	5,105
101 days or more 2/	10,709	2.9	10,665	6.0	575,824	11.3	54.0	35,579,741	10.7	3,336

1/ Covered days of care reflect beneficiaries with one or more covered stays during the year.
2/ Covered days of care reflect beneficiaries with more than one benefit period.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 29

Number of Part B users and balance billing liability for Medicare beneficiaries, by amount of balance billing liability: Calendar year 1988

Balance billing liability	Part B users			Balance billing liability			
	Number	Percent without balance billing	Percent with balance billing	Amount in thousands 1/	Percent	Average balance billing per person	Simulated balance billing cap 2/
Total, all persons served 3/	26,258,940	100.0	100.0	$1,895,600	100.0	$72	$723,314
Total, persons without balance billing	12,747,320	48.5	NA	NA	NA	NA	NA
Total, persons with balance billing	13,511,620	51.5	100.0	1,895,600	100.0	140	723,314
$1-100	9,779,400	37.2	83.6	277,137	14.6	28	166,776
101-250	1,904,800	7.3	9.7	296,661	15.7	156	125,188
251-500	921,000	3.5	4.1	318,271	16.8	346	124,212
501-1,000	559,320	2.1	2.2	380,257	20.1	680	136,800
1,001-2,500	293,800	1.1	0.4	426,131	22.5	1,450	126,199
2,501 & over	53,300	0.2	0.4	197,142	10.4	3,699	41,579

1/ The Part B balance billing liability shown in this table was derived from the BMAD beneficiary file and is about 15 percent less than the projected annual total population amount of $2.2 billion.
2/ Represents beneficiary balance billing liability for 1988 claims based on OBRA-89 legislation that limits (effective January 1992) the amount a nonparticipating physician can charge above the Medicare fee schedule amount. For simulation purposes, the limit used for 1988 claims was 15 percent above the Medicare allowed charge on unassigned claims.
3/ Includes persons receiving Part B services who did not meet the Part B deductible.

NOTE: NA denotes not applicable.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

V. Summary of the hospital insurance benefit for hospital inpatient services

The Medicare hospital insurance (HI or Part A) program covers inpatient hospital services for individuals enrolled in the HI program. To be covered under Part A, services must be provided by institutions and organizations that have been certified by Medicare as qualified providers and that have agreements to participate in the program. Most services provided by participating short-stay hospitals (SSHs) are covered under Medicare, and a list of these services appear in the Introduction, Table 1. Some services not covered by Medicare include: Personal convenience items such as a telephone or television, private duty nurses, and any extra charges for a private room unless it is determined to be medically necessary.

This section focuses on the use of the SSH inpatient benefit under Medicare and the costs to the Medicare program for services provided to the beneficiaries by participating SSHs during 1988. However, trend data for calendar years 1972-88 are also included to provide a baseline for measuring and evaluating the administration of the Medicare Part A SSH inpatient benefit. On a person basis, data are included for multiple hospital stays
(Table 30).

In April 1983, President Reagan signed into law the Social Security Amendments of 1983 (Public Law 98-21). Title VI of the amendment established the Medicare prospective payment system (PPS) for most short-stay hospitals certified to provide inpatient services to Medicare beneficiaries. Effective October 1, 1983, prospective payment was aimed at providing incentives to hospitals to control the costs without concurrently reducing the quality of care. Consequently, Title VI restructured the payment system by which hospitals are reimbursed for inpatient services provided to Medicare beneficiaries. For the most part, PPS replaced the original retrospective cost-based system by setting predetermined rates of program payments for a hospital stay. Prospective payment offers incentives for cost containment because if the hospital provides services at a cost less than the predetermined rate, it retains the difference.

Trends in Medicare utilization and program payments: 1972-88

For SSH inpatient services, the patterns (1972-88) of Medicare utilization and the corresponding program payments are summarized in Table 31. Highlights for Table 31 focus on the total days of care per 1,000 enrollees, because this statistic is considered to be the best measure of SSH inpatient use. Also discussed are Medicare program payments for SSH inpatient services, which have increased from $5.6 billion in 1972 to $46.9 billion in 1988. From 1972 to 1983, the average annual rate of growth (AARG) in program payments was 18.0 percent. In contrast, from 1983 to 1988, the AARG for program payments was 6.4 percent, reflecting the implementation of PPS.

Urban/rural issues

Since the implementation of PPS, the Medicare program has reimbursed urban and rural hospitals at separate rates based upon historical differences in costs. At the start of PPS, hospitals' costs were computed on a standardized per-case basis. Standardization covered both the medical characteristics of the patients (e.g., case mix as measured by DRGs) and hospital characteristics (e.g., wage differentials, the share of low-income patients served, and the indirect costs of medical education). After standardization, costs per case in rural hospitals were approximately 20 percent lower than for urban hospitals. This reflected geographical factors not eliminated in the standardization. Congress reduced this differential in fiscal year 1988 by granting to rural hospitals a greater adjustment to cost factors on which the payment amounts are based than it did for urban hospitals. Although differences between urban and rural payment rates are reflected in the data on program payments, the reader should bear in mind that the data are based on the residence of the beneficiary and are not based on the location of the hospital. Thus, the data are measures of the distribution of the Medicare inpatient hospital benefit by residence of the beneficiary rather than measures of differences in the use of and payments to hospitals in urban and rural areas. Unpublished data show that following the implementation of PPS, approximately one-fourth of all Medicare discharges from urban hospitals represent Medicare beneficiaries who reside in rural areas. Analysis of the data shows that rural residents do not appear to be disadvantaged in terms of access (Table 32).

Diagnosis-related groups

Diagnosis-related groups (DRGs) are the backbone of the Medicare PPS. Assigning a DRG code to a short-stay hospital discharge covered by Medicare is tantamount to determining the Medicare payment to the hospital, subject to certain statutory adjustments. Medicare has the responsibility to continually evaluate and improve the DRG classifications because the DRG assignment determines the Medicare payment to

hospitals under PPS. The PPS payment is expressed, in its simplest form, by the following formula:

PPS payment = DRG weight x Dollar rate,

where the DRG weight is an index number reflecting the relative use of resources associated with each DRG; and the dollar rate is an average national operating cost per discharge determined by HCFA. Thus, a change in an assignment to a DRG with a higher (lower) DRG weight will result in a higher (lower) PPS payment.

To measure the effects of PPS in the assignment of DRGs, the 66 DRGs assigned most frequently in 1988 to Medicare SSH discharge bills were compared with similar data for 1983 and 1985 (Table 33). Rather than real changes in the diagnosis or procedure that basically determine the assignment of the DRGs, analysis of the data reveals that most of the significant increases and decreases in the data are probably attributable to changes in (1) the method of reporting the principal diagnosis or surgical procedure - see Section on the 33 leading principal diagnoses and procedures, (2) the application and reinforcement of coding guidelines and conventions, (3) medical practice patterns (ibid.), and (4) advances in medical technology and research.

For example, the application and reinforcement of medical coding guidelines has resulted in a large increase in the number of discharges assigned to DRG 106 (Coronary bypass with cardiac catheterization). The number of discharges for DRG 106 increased 1,260 percent, rising from 4,545 discharges in 1983 to 61,815 in 1988. This large increase probably can be attributed to stricter adherence to medical coding guidelines related to the reporting and coding of cardiac catheterization (which was ignored, for the most part, prior to PPS). Furthermore, percutaneous transluminal coronary angioplasty (ICD-9-CM code 36.01) was added to the list of acceptable procedures for assignment to DRG 106, thus promoting additional increases.

A notable change was observed for DRG 462 (Rehabilitation), which increased from 3,510 discharges in 1983 to 74,450 in 1988, a rise of 2,021 percent. DRG 462 ascended in DRG rank order, climbing from the 321st position in 1983 to the 36th position in 1988. This singular increase, according to HCFA's Office of Medical Review (OMR), occurred with good reason. Originally, 7 principal diagnoses were identified as acceptable for assignment to DRG 462. Prior to the OMR study, the Medicare Code Editor rejected 6 of 7 principal diagnoses as nonpayable. Now the fiscal intermediaries have been instructed to reimburse the hospitals, after PRO review, for 5 additional diagnoses.

On the other hand, advancement in medical knowledge through research has probably produced substantial fluctuations in the number of SSH discharges assigned to DRG 005 (Extracranial vascular procedures). As the result of studies conducted by the National Institute of Health (NIH), HCFA determined that "Extracranial and intracranial arterial bypass surgery is not a covered procedure when it is performed as a treatment for ischemic cerebral vascular disease of the carotid or middle artery, which includes the treatment or prevention of strokes" (Coverage Issues Manual, pp 35-37. HCFA Pubs No. 6). NIH found that improving the blood supply to the brain did not reduce the risk of having a stroke. The number of discharges for DRG 005 decreased from 57,830 in 1985 to 47,530 in 1988.

Length of stay statistics by diagnosis-related groups

The length of stay statistics (Table 34) are arrayed by the 66 leading DRGs and are comprised of the average (mean) length of stay, the standard deviation of the ALOS, and the coefficient of variation. The coefficient of variation is defined as the ratio of the standard deviation to the ALOS.

The 33 leading principal diagnoses and procedures

In Tables 35 and 36, respectively, the 33 leading principal diagnoses or procedures (surgeries) are shown for Medicare beneficiaries discharged from participating SSHs in 1988. The codes for the diagnoses and procedures are appended to the discharge bill by medical coders who determine the diagnostic or surgical classification based on the narrative provided by the attending physician and the codes derived from the ICD-9-CM. The DRG assignment cannot be made until the diagnostic and procedural information is coded. The process of assigning DRGs, and the subsequent Medicare payment, begins with the principal diagnosis and the surgical procedure. Beginning in 1980, reporting was required for the principal diagnosis plus up to four secondary diagnoses and the principal surgical procedure plus up to two secondary procedures.

In 1983 and in the years prior to PPS, nearly one-third of all Medicare SSH discharges involved surgical procedures. In 1988, the proportion had increased to 62 percent, reflecting not a real change in the number of surgeries but increased coding accuracy induced by PPS. For example, prior to PPS little significance was attached to the completion and accuracy of medical reporting or coding. However, after PPS, more complete and accurate reporting and coding translated into dollars for the hospital, and thus complete

reporting (especially of surgical data) became the most critical element in the DRG assignment process.

Prior to the hospital admission, the careful assessment of the principal diagnosis or procedure has resulted in an emphasis on directing patients to alternative treatment sites. Prior to PPS, Medicare patients who required treatment for certain diagnoses or procedures would have been admitted routinely on an inpatient basis. Following the implementation of PPS, a hospital admission was deemed unacceptable when clinical evidence suggested that the patient could be treated as safely and as effectively on an outpatient basis. Therefore, many of the surgeries that were normally performed on an inpatient basis were shifted to the outpatient setting. Had this shift from inpatient to outpatient sites not occurred, it is possible that the ratio of inpatient surgical discharges to total discharges could have been even higher than the ratio shown in this report. The shifting of treatment settings is probably one of the many contributors to the decrease in hospital admissions in the post-PPS period. (For additional information on outpatient services, see Section IX.)

Table 30: Patterns of multiple stays for Medicare beneficiaries receiving short-stay hospital inpatient services: Selected calendar years 1967-88

- In 1967, about 25 percent of the aged Medicare beneficiaries who were discharged from SSHs had 2 or more stays within the same year.
- By 1976, the proportion of multiple stays for the aged had increased to about 30 percent.
- For both the aged and disabled Medicare beneficiaries discharged from SSHs during the period 1983-88, the proportion of persons having multiple stays was consistently between 34 and 35 percent.

Table 31: Discharges, average length of stay, days of care, and program payments for Medicare hospital insurance beneficiaries receiving short-stay hospital inpatient services: Calendar years 1972-88

As represented by the total days of care per 1,000 enrollees (TDOC rate), the patterns of Medicare SSH inpatient utilization showed an increase from 3,656 in 1972 to 3,889 in 1982 followed by a sharp decline to 2,804 in 1988, reflecting, for the most part, the implementation of PPS on October 1, 1983 (Figure 8). The TDOC rate reflects a combination of the discharge rate per 1,000 enrollees and the average length of stay (ALOS) per discharge. Thus, the discharge rate increased from 302 in 1972 to 387 in 1983, before dropping to 316 in 1988 (Figure 9). The average total length of stay dropped steadily from 1972 (12.1 days) to 1985 (8.7 days), before rising slightly in 1988 (8.9 days).

- From 1972 through 1983, total program payments for SSH inpatient services provided to Medicare beneficiaries rose from $5.6 billion to $34.3 billion, an average annual rate of change (AARC) of 18 percent.
- During the years following the implementation of PPS, however, Medicare program payments ($34.3 billion in 1983 and $46.9 billion in 1988) for SSH inpatient services had slowed to an AARC of 6.4 percent.
- For the period 1972-88, program payments for Medicare SSH inpatient services steadily increased from $5.6 billion to $46.9 billion, reflecting an overall AARC of 14.2 percent (Figure 10).
- The average program payment per discharge increased 423 percent, from $874 in 1972 to $4,571 in 1988; the average program payment per day was $72 in 1972 and $516 in 1988, an increase of 617 percent.

Table 32: Medicare utilization and program payments for beneficiaries discharged from short-stay hospitals in the United States, by area of residence and urban/rural areas: Calendar year 1988

- Of the total Medicare short-stay hospital (SSH) discharges (10.2 million) in the United States during 1988, about 29 percent (2.9 million) were for beneficiaries living in rural areas.
- There were no rural Medicare residents in three areas (New Jersey, Rhode Island, and the District of Columbia) because these have been designated as urban areas. Only about 5 percent of the discharges in California, Connecticut, and Massachusetts represented beneficiaries living in rural areas.
- An estimated 57 percent (1.7 million) of all discharges for beneficiaries from rural areas were concentrated in 15 States. In six of these States (Idaho, Mississippi, Montana, North Dakota, South Dakota, and Vermont) discharges for beneficiaries living in rural areas exceeded the discharges for those in urban areas by a factor of 3 to 6.
- Nationally, the difference in the average length of stay (ALOS) between urban (9.4 days) and rural (7.7 days) discharges was 1.7 days.
- Among the regions, the differences in the ALOS for urban versus rural discharges ranged from 1.1 days in the West Region to 1.9 days in the Northeast Region.
- Among the States, variations in the urban or rural ALOS were substantial. The ALOS for urban beneficiaries in the States of Alaska and Vermont was longer by 2.4 days and 2.8 days, respectively, than for beneficiaries from rural areas.
- Conversely, the urban and rural differences in ALOS between Idaho and Minnesota amounted to about one-half day.

- The average SSH program payment per discharge for beneficiaries residing in urban areas ($5,016) was approximately 40 percent higher than that for beneficiaries residing in rural areas ($3,563).
- By State, the differences in the average program payments varied substantially between urban and rural-dwelling beneficiaries. In two States (New Hampshire and Oregon), the difference was minimal, whereas the average program payment for beneficiaries from urban areas ($6,222) of New York was over 75 percent greater than the average for rural beneficiaries ($3,539).

Table 33: Medicare short-stay hospital discharges, average length of stay, and average charge per discharge, by the 66 leading diagnosis-related groups for 1988: Calendar years 1983, 1985, and 1988

- Discharges for the 66 leading (most frequently reported in calendar year 1988) DRGs accounted for 69 percent (7.1 million) of all SSH discharges (10.3 million) in 1988; in 1983, the same DRGs accounted for only 53 percent of all SSH discharges.
- The largest increase in the number of discharges was observed for DRG 462 (Rehabilitation), for which 3,510 discharges were reported in 1983 versus 74,450 in 1988, an increase of 2,021 percent. For an explanation of this phenomenon, see the summary section of this chapter.
- The ALOS for all DRGs declined from 9.8 days in 1983 to 8.9 days in 1988, a drop of 9 percent. Among the leading DRGs, the largest decline (46.4 percent) was noted for DRG 112 (Vascular procedures except major reconstruction with out pump).
- The ALOS for the 66 leading DRGs declined by 15 percent, decreasing from 10.4 days in 1983 to 8.8 days in 1988.
- The average charge per discharge for all DRGs jumped from $4,749 in 1983 to $7,668 in 1988, an increase of 61 percent. Among the leading DRGs, the largest increase (103.0 percent) was recorded for DRG 154 (Stomach, esophageal and duodenal procedures age greater than 17, with complication or comorbidity).
- For the 66 leading DRGs, the average charge rose 47 percent, from $5,065 in 1983 to $7,469 in 1988.

Table 34: Length-of-stay statistics and selected length-of-stay percentiles for Medicare beneficiaries discharged from short-stay hospitals, by the 66 leading diagnosis-related groups: Calendar year 1988

- Among the 66 leading DRGs reported for Medicare beneficiaries in 1988, the SSH inpatient mean length of stay (ALOS) was shortest (2.6 days) for DRG 162 (Inguinal and femoral hernia procedures, age greater than 17 years, without complications or comorbidity).
- The longest ALOS (22.6 days) was observed for DRG 462 (Rehabilitation).
- In 1988, the standard deviation of the ALOS ranged from 2.1 days (with an ALOS of 2.6 days) for DRG 162 to 24.3 days (the ALOS was 14.2 days) for DRG 429 (Organic disturbances and mental retardation).
- The overall standard deviation for all DRGs was 11.6 days; for the 66 leading DRGs, the standard deviation was 10.9 days.
- For the 66 leading DRGs, the coefficient of variation (CV, the ratio of the standard deviation to the ALOS) ranged from 0.5 days for DRG 198 to 1.7 days for DRG 429.
- The CV for all DRGs was 1.3 days; for the 66 leading DRGs, the CV was 1.2 days.
- For the 66 leading DRGs, the selected length of stay percentiles ranged from 2.0 days (10th percentile) to 17.0 days (90th percentile). The median length of stay (50th percentile) was 6.3 days.

Table 35: Number of discharges, total days of care, and program payments for Medicare beneficiaries discharged from short-stay hospitals, by the 33 leading principal diagnoses within major classification: Calendar year 1988

- The 33 leading (most frequently reported) principal diagnoses accounted for nearly 40 percent (4.0 million) of the total Medicare SSH inpatient discharges (10.3 million) during 1988.
- The leading principal diagnoses accounted for 32.2 million days of care and $16.6 billion in program payments, representing 35 percent, respectively, of all days of care and program payments.
- The principal diagnosis with the most discharges was congestive heart failure (ICD-9-CM code 428.0), accounting for 5.2 percent (529,700) of all discharges and 4.4 percent ($2.1 billion) of all SSH program payments.
- The ALOS per discharge among the 33 leading principal diagnoses ranged from a low of 3.5 days per discharge for maintenance chemotherapy (ICD-9-CM code V58.1) to a high of 14.2 days for fracture of neck, pertrochanteric fracture, closed, intertrochanteric section (ICD-9-CM code 820.21).
- The average program payment per discharge among the leading principal conditions ranged from $1,753 for chest pain, unspecified (ICD-9-CM code 786.50) to $9,691 for coronary atherosclerosis (ICD-9-CM code 414.0).

- The average program payment per day among the leading diagnoses ranged from $348 for diabetes with unspecified complications, type 1, insulin dependent (ICD-9-CM code 250.91) to $1,198 for coronary atherosclerosis (ICD-9-CM code 414.0).

Table 36: Number of discharges with surgery, total days of care, and program payments for Medicare beneficiaries discharged from short-stay hospitals, by the 33 leading surgical procedures within major classification: Calendar year 1988

- In 1988, discharges for Medicare beneficiaries with surgery accounted for 62 percent (6.4 million) of all SSH discharges, 70 percent (63.8 million) of all SSH days of care, and 76 percent ($35.6 billion) of all SSH program payments.
- The 33 leading surgical procedures accounted for 23 percent (1.5 million) of all SSH discharges with surgery and 31 percent ($10.9 billion) of all SSH program payments for surgical procedures.
- The average program payment per discharge ranged from a low of $1,940 for repair of indirect inguinal hernia (ICD-9-CM code 53.02) to a high of $19,603 for aortocoronary bypass of three coronary arteries (ICD-9-CM code 36.13).
- Similarly, the average program payment per day ranged from $472 for other amputation below the knee (ICD-9-CM code 84.15) to $1,292 for aortocoronary bypass of two coronary arteries (ICD-9-CM code 36.12).

Table 37: Number of discharges, total days of care, and program payments for all hospital inpatient Medicare beneficiaries, by total days of care: Calendar year 1988

- Nearly three-fifths (6.1 million) of all Medicare short-stay hospital (SSH) discharges (10.3 million) had an inpatient stay of 7 days or less. These beneficiaries accounted for about 26 percent (24.1 million) of all Medicare days of care (91.2 million) and 38 percent ($17.7 billion) of the total Medicare program payments ($46.9 billion).
- Of all discharges (10.3 million) for SSH hospital inpatient services in 1988, an estimated 9.9 million, or approximately 97 percent, had less than 31 total days of care during the year.
- Thus, 97 percent of the Medicare SSH discharges accounted for 82 percent (74.8 million) of the total days of care (91.2 million) and 88 percent ($41.2 billion) of all Medicare program payments ($46.9 billion).
- Conversely, 0.6 percent (59.8 thousand) of the Medicare SSH discharges had more than 60 days of care, accounting for 7 percent (6.0 million) of the total days of care and 4 percent ($1.8 billion) of program payments.
- Approximately 0.2 percent (21.9 thousand) of Medicare SSH discharges accounted for more than 90 total days of care during the year, comprising about 3.6 percent (3.3 million) of all total days of care and 1.7 percent ($785.3 million) of program payments.

Table 38: Type of short-stay hospital accommodation and ancillary services for Medicare beneficiaries, number of discharges, and amount of total charges, by total days of care: Calendar year 1988

- For inpatient services rendered to Medicare beneficiaries in participating SSHs, routine room and board accommodations accounted for about 28 percent ($21.8 billion) of the total charges ($78.6 billion) (Figure 11).
- Services provided in intensive care and coronary care units comprised 8 percent ($6.4 billion) of all short-stay hospital inpatient charges.
- Charges for ancillary services, thereby, accounted for about 64 percent ($50.2 billion) of all short-stay hospital charges.
- Of the individual ancillary services, pharmacy (14 percent) and laboratory services (15 percent) combined accounted for about 29 percent ($23.0 billion) of all SSH charges.
- Nearly three-fourths ($36.9 billion) of all ancillary charges were incurred during stays of 20 days or less.
- For operating room and anesthesia services, over four-fifths of the ancillary charges were incurred for stays of 20 days or less.
- The ratio of ancillary charges to total charges dropped, as expected, with the increase in the length of stay. That is, the ratio was 0.66 for stays of 1 to 8 days, and thereby dropped constantly to a ratio of 0.56 for stays over 90 days.

Table 39: Number of enrollees, number of discharges, total days of care, and program payments for Medicare beneficiaries discharged from short-stay hospitals, by selected demographic characteristics: Calendar year 1988

- During 1988, approximately 10.3 million Medicare beneficiaries were discharged from SSHs, representing 316 discharges per 1,000 HI enrollees.
- By age, the discharge rate per 1,000 enrollees for aged beneficiaries increased from 221 for persons 65 through 69 years of age to 471 for persons 85 years of age and over, a difference of 113 percent.
- The average program payment per discharge was highest for those beneficiaries 70-74 years of age ($4,686) and 75-79 years of age ($4,644).
- There was a substantial difference in the use and cost of SSH services for beneficiaries with end stage renal disease (ESRD).
- The discharge rate per 1,000 enrollees for ESRD beneficiaries was 1,443 or about 4.7 times higher than the discharge rate for all beneficiaries.
- The average program payment per discharge for ESRD beneficiaries was $6,567, or about 44 percent higher than that for all beneficiaries.
- Beneficiaries with a rural residence (348 per 1,000) had a somewhat higher discharge rate than beneficiaries with an urban residence (315 per 1,000).
- Urban beneficiaries, however, had a 40 percent higher average program payment per discharge ($4,987) than did rural beneficiaries ($3,552).

Table 30

Patterns of multiple stays for Medicare beneficiaries receiving short-stay hospital inpatient services: Selected calendar years 1967-88

Number of stays	1967 1/	1976 1/	1983	1986	1988
			Number of persons served in thousands		
Total	3,774	5,235	7,236	6,372	6,533
1 stay	2,815	3,692	4,724	4,216	4,337
2 stays	681	1,036	1,534	1,324	1,353
3 or more stays	278	507	978	831	842
			Percent of persons served		
Total	100.0	100.0	100.0	100.0	100.0
1 stay	74.6	70.5	65.3	66.2	66.4
2 stays	18.0	19.8	21.2	20.8	20.7
3 or more stays	7.4	9.7	13.5	13.0	12.9

1/ Represents aged Medicare beneficiaries only.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 31

Discharges, average length of stay, days of care, and program payments for Medicare hospital insurance beneficiaries receiving short-stay hospital inpatient services: Calendar years 1972-88

Year	Discharges		Average length of stay in days		Days of care			Program payments				
					Total		Covered					
	Number in thousands	Rate per 1,000 enrollees	Total	Covered	Number in thousands	Rate per 1,000 enrollees	Number in thousands	Amount in millions	Percent change	Per discharge	Per day	Percent of total charges
1972	6,380	302	12.1	11.8	77,198	3,656	75,284	$5,576	—	$874	$72	75.3
1973	6,984	300	11.7	11.5	81,529	3,499	79,976	6,446	15.6	952	79	78.2
1974	7,629	319	11.5	11.3	87,523	3,658	86,193	7,837	21.6	1,027	90	74.8
1975	8,001	325	11.2	11.0	89,275	3,623	87,656	9,748	24.4	1,218	109	74.6
1976	8,465	334	11.0	10.8	93,480	3,693	91,770	11,803	21.1	1,394	126	74.1
1977	8,808	338	11.0	10.8	96,825	3,711	95,119	13,944	18.1	1,583	144	73.0
1978	9,216	344	10.8	10.6	99,372	3,711	97,598	16,008	14.8	1,737	161	71.4
1979	9,642	351	10.7	10.4	102,469	3,750	100,521	18,463	15.3	1,915	180	70.7
1980	10,279	366	10.6	10.4	109,175	3,890	106,512	22,099	19.7	2,150	202	69.1
1981	10,660	368	10.4	10.1	110,806	3,827	107,233	25,936	17.4	2,433	234	68.0
1982	11,109	382	10.2	9.8	113,047	3,889	109,249	30,601	18.0	2,755	271	66.0
1983	11,436	387	9.8	9.5	112,011	3,786	109,189	34,338	12.2	3,003	307	63.4
1984	10,896	363	8.9	8.6	96,485	3,217	93,850	38,500	12.1	3,533	399	72.8
1985	10,335	313	8.7	8.4	89,822	2,719	87,198	40,786	5.9	3,947	454	73.5
1986	10,044	322	8.7	8.4	86,910	2,784	84,608	41,781	3.9	4,160	481	70.4
1987	10,110	317	8.9	8.6	89,651	2,815	86,764	44,068	5.5	4,359	492	64.3
1988 1/	10,256	316	8.9	8.5	90,873	2,804	87,480	46,879	6.4	4,571	516	59.7
					Average annual rate of change							
1972-83	5.4	2.3	-1.9	-2.0	3.4	0.3	3.4	18.0	—	11.9	14.0	-1.6
1983-88	-2.2	-4.0	-1.9	-2.2	-4.1	-5.8	-4.3	6.4	—	8.8	11.0	-1.2
1972-88	3.0	0.3	-1.9	-2.0	1.0	-1.6	0.9	14.2	—	10.9	13.1	-1.4

1/ Preliminary. Final data are estimated to be about 3 percent higher than the amounts shown for 1988.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

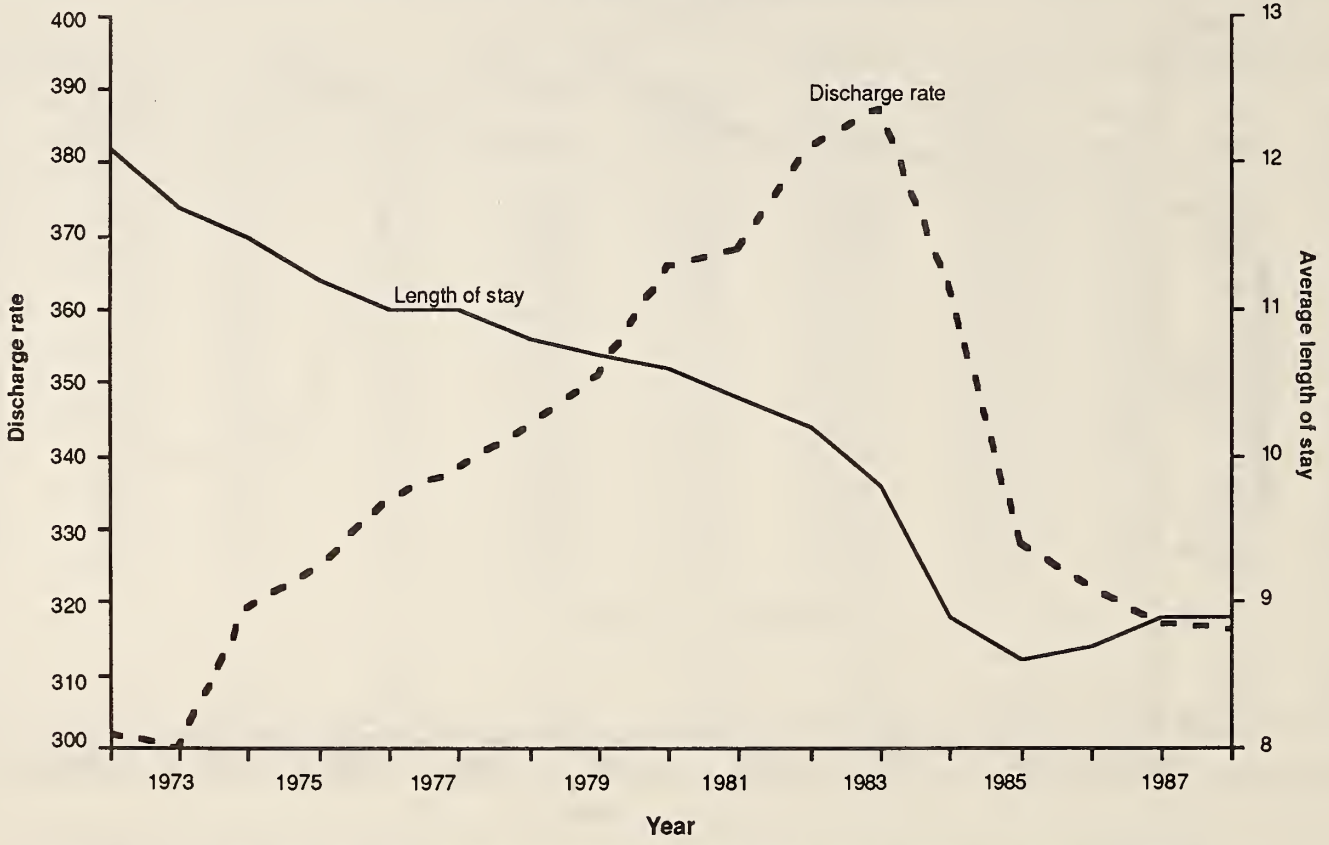
Figure 8

Total days of care per 1,000 enrollees for Medicare beneficiaries discharged from short-stay hospitals: Calendar years 1972-88

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Figure 9

Discharge rate per 1,000 enrollees, and average length of stay for Medicare beneficiaries discharged from short-stay hospitals: Calendar years 1972-88



SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Figure 10

Percent change in program payments for inpatient services rendered to Medicare beneficiaries discharged from short-stay hospitals: Calendar years 1973-88

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 32
Medicare utilization and program payments for beneficiaries discharged from short-stay hospitals in the United States, by area of residence and urban/rural areas: Calendar year 1988

Area of residence	Number of discharges in thousands			Average total days of care			Average amount of program payments per discharge			Average program payment per enrollee		
	Total	Urban 1/	Rural 1/	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural
United States 2/	10,165	7,223	2,942	8.9	9.4	7.7	$4,596	$5,016	$3,563	$1,473	$1,562	$1,231
Northeast	2,257	1,985	273	10.0	11.4	9.5	5,277	5,486	3,755	1,661	1,709	1,280
North Central	2,613	1,688	925	8.4	9.0	7.4	4,482	4,942	3,641	1,444	1,579	1,192
South	3,687	2,260	1,427	8.5	8.9	7.8	4,084	4,536	3,367	1,399	1,473	1,263
West	1,607	1,289	318	7.3	7.5	6.4	4,999	5,233	4,050	1,418	1,473	1,186
New England	540	465	75	5.5	10.8	9.0	4,918	5,068	3,985	1,456	1,495	1,210
Connecticut	119	115	4	10.6	10.6	9.4	5,458	5,496	4,358	1,435	1,441	1,251
Maine	54	29	25	9.5	10.3	8.7	3,984	4,421	3,484	1,230	1,299	1,142
Massachusetts	263	248	15	10.9	11.0	9.2	5,067	5,081	4,838	1,589	1,610	1,292
New Hampshire	37	24	13	9.0	9.3	8.6	4,213	4,329	4,008	1,195	1,199	1,187
Rhode Island	46	46	N/A	11.4	11.4	N/A	4,686	4,686	N/A	1,406	1,406	N/A
Vermont	20	3	17	9.7	12.1	9.3	4,142	5,525	3,874	1,178	1,653	1,091
Middle Atlantic	1,717	1,520	198	11.5	11.6	9.8	5,390	5,614	3,668	1,731	1,779	1,311
New Jersey	329	329	N/A	11.7	11.6	N/A	5,232	5,232	N/A	1,641	1,640	N/A
New York	740	652	89	13.0	13.2	11.2	5,900	6,222	3,539	1,807	1,871	1,254
Pennsylvania	648	539	109	9.5	9.7	8.6	4,887	5,113	3,770	1,683	1,746	1,356
East North Central	1,821	1,335	487	8.6	9.1	7.5	4,673	5,032	3,688	1,533	1,645	1,222
Illinois	499	376	123	8.8	9.3	7.6	4,744	5,163	3,462	1,599	1,715	1,223
Indiana	237	151	85	8.2	8.6	7.5	4,189	4,511	3,620	1,354	1,430	1,213
Michigan	370	282	88	8.9	9.4	7.4	5,150	5,481	4,092	1,615	1,723	1,274
Ohio	500	393	107	8.8	9.1	7.7	4,710	4,965	3,778	1,602	1,689	1,285
Wisconsin	216	133	83	7.7	8.3	7.1	4,135	4,501	3,549	1,295	1,417	1,102
West North Central	792	354	438	7.9	8.6	7.3	4,042	4,604	3,589	1,251	1,354	1,160
Iowa	135	49	87	8.0	8.9	7.6	3,853	4,188	3,665	1,169	1,290	1,103
Kansas	123	47	76	7.5	8.5	7.1	3,909	4,670	3,440	1,366	1,493	1,276
Minnesota	143	70	73	6.9	7.0	6.6	4,053	4,390	3,729	1,019	980	1,067
Missouri	249	149	100	8.8	9.2	8.1	4,387	4,832	3,723	1,447	1,606	1,214
Nebraska	67	23	44	7.8	9.0	7.2	3,864	4,738	3,404	1,109	1,308	998
North Dakota	36	8	27	7.3	8.1	6.9	3,745	4,482	3,518	1,396	1,389	1,434
South Dakota	39	7	31	7.0	7.8	6.8	3,454	4,082	3,307	1,249	1,246	1,249
South Atlantic	1,822	1,257	565	8.9	9.2	8.4	4,279	4,616	3,528	1,365	1,424	1,218
Delaware	27	16	11	9.4	9.9	8.5	4,396	4,992	3,559	1,404	1,493	1,255
District of Columbia	25	25	N/A	12.1	13.0	N/A	7,956	7,956	N/A	2,680	2,680	N/A
Florida	623	552	71	8.5	8.7	7.8	4,459	4,522	3,969	1,288	1,296	1,218
Georgia	257	138	119	8.0	8.6	7.4	3,660	4,120	3,127	1,373	1,469	1,249
Maryland	178	162	16	9.1	9.4	8.3	5,109	5,227	3,894	1,792	1,845	1,286
North Carolina	251	116	135	9.7	10.2	9.3	4,113	4,616	3,681	1,243	1,282	1,203
South Carolina	121	68	53	9.3	9.9	8.9	4,074	4,390	3,668	1,203	1,275	1,107
Virginia	234	142	92	9.0	9.4	8.6	4,014	4,395	3,426	1,395	1,481	1,250
West Virginia	108	40	68	8.2	8.8	8.0	3,661	4,099	3,404	1,340	1,510	1,242

See footnotes at end of table.

Table 32—Continued

Medicare utilization and program payments for beneficiaries discharged from short-stay hospitals in the United States, by area of residence and urban/rural areas: Calendar year 1988

Area of residence	Number of discharges in thousands			Average total days of care			Average amount of program payments per discharge			Average program payment per enrollee		
	Total	Urban 1/	Rural 1/	Total	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural
East South Central	813	376	437	8.1	8.8	7.6	$3,543	$4,127	$3,040	$1,400	$1,506	$1,294
Alabama	199	118	81	8.0	8.4	7.3	3,777	4,144	3,239	1,363	1,453	1,223
Kentucky	197	78	119	8.1	8.7	7.8	3,570	4,222	3,144	1,390	1,517	1,295
Mississippi	156	33	123	7.7	8.6	7.7	3,020	3,776	2,815	1,354	1,521	1,303
Tennessee	261	147	115	8.4	9.1	7.4	3,655	4,142	3,033	1,463	1,542	1,343
West South Central	1,052	628	425	8.0	8.4	7.4	4,164	4,620	3,490	1,462	1,561	1,299
Arkansas	137	42	95	7.9	8.8	7.8	3,387	3,846	3,182	1,241	1,361	1,185
Louisiana	196	122	74	7.6	8.1	7.1	4,193	4,655	3,431	1,652	1,755	1,461
Oklahoma	161	74	87	7.8	8.5	7.2	3,928	4,500	3,445	1,469	1,573	1,368
Texas	558	389	169	8.1	8.4	7.4	4,413	4,717	3,711	1,452	1,527	1,271
Mountain	434	260	175	7.0	7.5	6.4	4,426	4,857	3,787	1,279	1,350	1,162
Arizona	134	102	32	7.2	7.5	6.8	4,914	5,111	4,294	1,437	1,506	1,226
Colorado	87	65	22	7.4	7.9	6.2	4,618	4,920	3,731	1,215	1,277	1,024
Idaho	36	5	31	6.1	6.8	6.3	3,890	4,846	3,733	1,105	1,122	1,101
Montana	39	8	31	6.5	7.3	6.4	3,647	4,054	3,538	1,268	1,318	1,254
Nevada	32	28	4	7.9	8.0	6.8	4,997	5,083	4,453	1,344	1,451	874
New Mexico	50	20	30	6.6	7.0	6.6	3,677	3,929	3,508	1,129	1,067	1,180
Utah	39	27	12	6.4	6.8	5.6	4,363	4,602	3,818	1,158	1,161	1,150
Wyoming	18	5	13	6.5	8.0	6.6	3,822	4,077	3,726	1,415	1,503	1,381
Pacific	1,173	1,030	143	7.3	7.5	6.4	5,211	5,328	4,371	1,469	1,505	1,212
Alaska	6	2	4	7.7	9.8	7.4	6,347	7,573	5,662	1,697	1,970	1,537
California	887	830	57	7.5	7.6	6.5	5,474	5,525	4,725	1,593	1,606	1,403
Hawaii	23	16	7	9.7	10.6	8.5	4,635	5,097	3,598	941	990	813
Oregon	101	64	37	6.2	6.5	5.9	4,082	4,106	4,043	1,030	1,011	1,063
Washington	156	118	37	6.7	7.0	6.0	4,493	4,592	4,180	1,211	1,227	1,157

1/ Based on the area of residence of the beneficiary. Refer to Glossary for the definition of urban and rural classifications.
2/ Includes unknown areas.

NOTES: N/A denotes not applicable. Differences in program payments are not adjusted to account for differences in inpatient case mix.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 33

Medicare short-stay hospital discharges, average length of stay, and average charge per discharge, by the 66 leading diagnosis-related groups (DRGs) for 1988: Calendar years 1983, 1985, and 1988

Leading DRG code number in 1988	Discharges				Rank order by 1988 DRGs			Average length of stay				Average charge per discharge			
	Number			Percent change				Number of days			Percent change	Amount			Percent change
	1983	1985	1988	1983-88	1983	1985	1988	1983	1985	1988	1983-88	1983	1985	1988	1983-88
Total	11,547,300	10,334,630	10,256,235	-11.2	—	—	—	9.8	8.7	8.9	-9.2	$4,749	$5,369	$7,668	61.5
Leading DRG's 1/	6,169,650	6,841,505	7,079,035	14.7	—	—	—	10.4	8.8	8.8	-15.4	5,065	5,423	7,469	47.5
005 2/	43,880	57,830	47,530	8.3	54	42	52	10.9	8.6	7.8	-28.4	7,175	7,157	9,316	29.8
014	299,445	322,690	328,900	9.8	4	5	3	15.0	11.3	10.9	-27.3	6,046	5,700	7,324	21.1
015	158,820	172,925	150,395	-5.3	14	11	11	7.1	5.7	5.7	-19.7	2,767	2,727	3,638	31.5
024	41,620	60,780	50,205	20.6	60	41	50	7.9	6.7	7.8	-1.3	3,483	3,683	6,030	73.1
079	25,765	72,370	101,885	295.4	99	36	25	14.5	12.6	12.6	-13.1	8,286	9,248	10,765	29.9
082	138,370	105,765	77,030	-44.3	17	25	34	10.9	9.6	9.7	-11.0	5,007	5,294	6,991	39.6
087	63,535	100,960	68,265	7.4	36	26	39	11.2	9.7	8.7	-22.3	7,605	8,340	8,376	10.1
088	273,100	177,105	92,275	-66.2	6	9	30	9.7	8.3	7.8	-19.6	4,845	5,085	5,891	21.6
089	262,795	357,540	322,675	22.8	7	3	4	10.9	9.1	9.3	-14.7	5,054	5,206	6,823	35.0
090	57,430	20,340	83,085	44.7	41	108	32	9.6	7.0	6.9	-28.1	4,737	3,580	4,409	-6.9
096	143,405	192,575	215,125	50.0	16	8	6	8.1	7.0	7.4	-8.6	3,435	3,854	5,403	57.3
097	59,635	26,465	51,325	-13.9	39	88	49	7.5	5.8	5.5	-26.7	3,329	3,078	3,714	11.6
099	36,070	44,475	36,975	2.5	71	58	65	7.7	5.9	6.1	-20.8	3,882	3,422	4,967	27.9
106 2/	4,545	35,415	61,815	1,260.1	284	68	42	16.4	16.7	16.8	2.4	21,913	27,282	35,852	63.6
107 2/	50,340	34,290	44,790	-11.0	50	70	57	15.5	13.6	13.0	-16.1	20,931	22,194	28,318	35.3
110 2/	35,010	62,175	69,685	99.0	75	39	38	17.4	15.6	16.4	-5.7	14,362	16,049	22,349	55.6
112 2/	35,260	38,135	109,830	211.5	73	64	20	14.0	11.5	7.5	-46.4	10,488	9,894	11,655	11.1
116 2/	48,125	53,985	52,065	8.2	51	44	48	10.5	8.5	7.9	-24.8	11,933	12,126	14,459	21.2
121	35,095	121,030	142,240	305.3	74	21	13	12.9	11.5	10.5	-18.6	7,326	7,544	9,344	27.5
122	195,375	147,230	125,535	-35.7	11	16	17	11.9	9.3	7.5	-37.0	5,901	5,299	6,303	6.8
123	56,260	72,820	65,765	16.9	43	35	40	6.1	5.5	5.4	-11.5	5,582	6,096	7,934	42.1
124	7,165	48,840	89,615	1,150.7	243	50	31	9.1	6.6	6.3	-30.8	6,815	5,825	7,318	7.4
125	31,160	82,600	107,560	245.2	86	31	22	5.4	3.3	3.1	-42.6	4,437	3,136	4,103	-7.5
127	457,470	512,055	537,875	17.6	1	1	1	10.1	8.2	8.1	-19.8	4,559	4,518	5,956	30.6
130	97,655	83,215	60,855	-37.7	26	29	43	10.0	7.6	8.2	-18.0	4,089	3,643	5,270	28.9
138	179,280	215,345	174,970	-2.4	12	6	9	7.5	6.0	6.4	-14.7	3,794	3,468	5,057	33.3
139	49,830	23,425	79,735	60.0	51	100	33	6.3	4.3	4.3	-31.7	3,333	2,508	3,229	-3.1
140	273,360	359,680	367,585	34.5	5	2	2	6.5	5.2	4.8	-26.2	3,049	2,883	3,586	17.6
141	70,415	95,130	74,750	6.2	32	27	35	6.5	5.3	5.9	-9.2	2,750	2,739	4,104	49.2
142	16,250	10,175	40,495	149.2	147	179	60	5.6	4.0	4.2	-25.0	2,538	2,162	2,989	17.8
143	88,370	80,320	98,670	11.7	29	32	27	5.5	3.9	3.6	-34.5	2,716	2,377	2,968	9.3
144	15,695	43,640	45,000	186.7	151	59	56	9.3	8.1	7.7	-17.2	5,191	5,148	6,475	24.7
148 2/	74,520	120,725	117,300	57.4	31	22	18	18.8	16.6	17.4	-7.4	12,062	13,533	19,699	63.3
154 2/	37,055	48,005	48,705	31.4	69	51	51	16.6	16.7	17.7	6.6	11,227	15,588	22,786	103.0
162	32,955	24,055	45,310	37.5	84	96	55	4.8	3.4	2.6	-45.8	2,304	2,080	2,485	7.9

See footnotes at end of table.

Table 33—Continued

Medicare short-stay hospital discharges, average length of stay, and average charge per discharge, by the 66 leading diagnosis-related groups (DRGs) for 1988: Calendar years 1983, 1985, and 1988

Leading DRG code number in 1988	Discharges				Rank order by 1988 DRGs			Average length of stay				Average charge per discharge			
	Number			Percent change				Number of days			Percent change	Amount			Percent change
	1983	1985	1988	1983-88	1983	1985	1988	1983	1985	1988	1983-88	1983	1985	1988	1983-88
174	110,005	155,820	135,980	23.6	24	15	15	8.7	6.9	7.2	-17.2	$4,227	$4,007	$5,643	33.5
180	52,175	70,985	56,285	7.9	46	37	46	8.8	7.1	8.0	-9.1	3,730	3,446	5,466	46.5
182	371,795	322,875	241,720	-35.0	3	4	5	7.0	5.9	6.4	-8.6	2,636	2,784	4,325	64.1
183	130,925	49,865	92,745	-29.2	18	47	29	6.1	4.6	4.6	-24.6	2,435	2,151	2,880	18.3
188	58,995	48,960	36,590	-38.0	40	49	66	7.9	6.2	7.5	-5.1	3,596	3,526	6,020	67.4
197 2/	62,655	75,050	62,930	0.4	38	34	41	13.4	10.8	10.5	-21.6	7,287	7,418	10,293	41.3
198	31,125	18,235	39,930	28.3	87	116	63	10.5	7.4	6.5	-38.1	5,394	4,435	5,425	0.6
209 2/	117,460	169,970	209,080	78.0	22	12	7	17.5	14.3	12.5	-28.6	9,855	10,663	13,652	38.5
210 2/	96,570	125,360	95,695	-0.9	27	19	28	18.6	15.3	15.2	-18.3	8,563	8,823	12,137	41.7
211	11,145	7,755	43,615	291.3	184	208	59	16.9	12.6	11.4	-32.5	8,286	7,278	8,381	1.1
236	52,580	45,605	40,155	-23.6	45	54	61	16.6	11.8	10.2	-38.6	5,557	4,599	5,179	-6.8
239	43,880	63,010	58,540	33.4	55	38	44	12.2	10.1	10.4	-14.8	4,276	4,260	5,888	37.7
243	208,935	174,170	129,050	-38.2	10	10	16	9.2	7.3	7.0	-23.9	2,997	2,902	3,780	26.1
277	47,735	61,365	56,385	18.1	52	40	45	10.8	8.7	9.3	-13.9	4,006	3,957	5,510	37.5
294	177,220	123,335	99,250	-44.0	13	20	26	9.7	8.0	7.7	-20.6	3,469	3,512	4,520	30.3
296	125,515	213,985	190,695	51.9	7	7	8	10.0	7.8	8.8	-12.0	3,909	3,691	5,592	43.1
297	24,850	11,990	54,720	120.2	201	52	47	8.4	5.9	5.8	-31.0	3,635	2,690	3,195	-12.1
316	55,235	44,640	39,935	-27.7	44	57	62	11.1	9.4	9.4	-15.3	6,471	5,790	7,382	14.1
320	124,600	145,000	145,195	16.5	20	17	12	9.3	8.1	8.8	-5.4	3,619	3,962	6,014	66.2
321	29,300	11,890	38,460	31.3	190	156	64	7.7	5.9	6.3	-18.2	3,065	2,846	3,781	23.4
336 2/	115,725	164,965	103,020	-11.0	23	13	24	8.9	7.1	6.9	-22.5	4,174	4,110	5,638	35.1
337 2/	37,505	24,650	104,550	178.8	69	94	23	7.2	5.4	4.6	-36.1	3,398	3,069	3,684	8.4
395	99,695	87,475	73,010	-26.8	25	28	37	8.2	6.3	6.5	-20.7	3,325	3,223	4,431	33.3
410	39,590	108,035	137,890	248.3	63	24	14	3.7	3.3	3.5	-5.4	1,918	2,237	3,081	60.6
416	42,025	82,835	109,140	159.7	59	30	21	13.4	10.7	10.7	-20.1	7,598	7,060	9,006	18.5
429	63,180	45,800	45,515	-28.0	37	53	54	13.6	12.4	14.2	4.4	3,715	4,364	6,655	79.1
430	95,755	136,750	173,770	81.5	28	18	10	17.2	16.7	16.8	-2.3	5,020	5,662	7,484	49.1
442 2/	21,375	41,115	43,770	104.8	112	62	58	13.0	9.9	10.3	-20.8	8,642	8,673	12,077	39.7
462	3,510	28,650	74,450	2,021.1	321	82	36	24.9	22.2	22.6	-9.2	9,109	10,408	13,854	52.1
468	223,530	157,255	114,965	-48.6	8	14	19	16.7	15.6	17.5	4.8	10,043	11,107	16,591	65.2
475	N/A	N/A	46,180	N/A	N/A	N/A	53	N/A	N/A	14.5	N/A	N/A	N/A	21,325	N/A
All other DRG's	5,377,650	3,493,125	3,177,910	-40.9	—	—	—	9.2	8.7	9.1	-1.1	4,385	5,264	8,109	84.9

1/ Based on frequency of occurrence in 1988. Complete definitions of DRG code numbers are given in Appendix B.
2/ Represents surgical DRGs.

NOTE: N/A denotes not applicable.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 34

Length-of-stay statistics and selected length-of-stay percentiles for Medicare beneficiaries discharged from short-stay hospitals, by the 66 leading diagnosis-related groups (DRGs): Calendar year 1988

DRG number	Length-of-stay statistics			Selected length-of-stay percentiles				
	Mean	Standard deviation	Coefficient of variation	10th	25th	50th	75th	90th
Total	8.90	11.59	1.30	1.85	3.44	6.20	10.57	17.51
Leading DRGs 1/	8.79	10.92	1.24	2.00	3.61	6.33	10.56	17.01
005 2/	7.83	8.42	1.08	2.94	3.99	5.61	9.08	14.58
014	10.88	14.55	1.34	2.52	4.56	7.67	12.64	20.75
015	5.72	7.64	1.34	1.68	2.68	4.28	6.70	10.22
024	7.84	10.62	1.35	1.96	3.21	5.31	8.98	15.03
079	12.59	12.48	0.99	3.69	6.25	9.77	15.32	23.36
082	9.67	13.29	1.37	1.78	3.62	7.09	12.21	19.45
087	8.67	8.70	1.00	1.68	3.88	6.71	10.82	16.74
088	7.83	9.07	1.16	2.58	3.97	6.13	9.27	14.17
089	9.25	9.26	1.00	3.12	4.98	7.52	11.19	16.30
090	6.88	4.86	0.71	2.86	4.19	6.01	8.35	11.45
096	7.40	8.65	1.17	2.81	4.08	6.04	8.79	12.81
097	5.54	3.63	0.66	2.21	3.29	4.82	6.91	9.43
099	6.08	6.36	1.05	1.61	2.68	4.49	7.43	11.78
106 2/	16.84	13.05	0.77	8.67	10.70	13.81	18.66	26.85
107 2/	12.98	10.51	0.81	7.43	8.44	10.24	13.86	20.32
110 2/	16.36	16.31	1.00	5.69	8.35	11.94	18.77	30.61
112 2/	7.47	8.62	1.15	1.73	2.92	5.34	9.21	14.91
116 2/	7.88	7.94	1.01	2.39	3.74	6.10	9.70	14.63
121	10.52	8.34	0.79	3.68	6.41	9.17	12.68	17.84
122	7.50	5.06	0.67	2.03	4.50	7.17	9.58	12.38
123	5.43	7.91	1.46	0.53	1.33	2.60	6.72	13.07
124	6.30	6.00	0.95	1.69	2.33	4.89	8.14	12.57
125	3.09	3.07	0.99	0.65	1.62	2.08	3.69	6.71
127	8.09	8.85	1.09	2.57	3.99	6.24	9.69	14.93
130	8.15	7.52	0.92	1.64	3.60	6.97	10.30	14.93
138	6.37	8.01	1.26	1.80	2.95	4.80	7.64	11.76
139	4.25	3.94	0.93	1.56	2.10	3.40	5.33	7.95
140	4.82	5.46	1.13	1.71	2.63	3.96	5.91	8.52
141	5.90	7.11	1.21	1.79	2.79	4.37	6.87	10.49
142	4.20	5.00	1.19	1.69	2.11	3.36	5.15	7.46
143	3.58	4.25	1.19	1.36	1.89	2.91	4.35	6.39
144	7.74	7.34	0.95	1.81	3.34	5.89	9.64	15.19
148 2/	17.41	15.53	0.89	7.63	9.70	13.39	19.89	30.59

See footnotes at end of table.

Table 34—Continued

Length-of-stay statistics and selected length-of-stay percentiles for Medicare beneficiaries discharged from short-stay hospitals, by the 66 leading diagnosis-related groups (DRGs): Calendar year 1988

DRG number	Length-of-stay statistics			Selected length-of-stay percentiles				
	Mean	Standard deviation	Coefficient of variation	10th	25th	50th	75th	90th
154 2/	17.65	17.60	1.00	5.00	8.25	13.00	21.09	33.82
162	2.58	2.07	0.80	0.62	1.54	2.13	3.28	4.66
174	7.20	7.46	1.04	2.33	3.68	5.57	8.47	12.97
180	7.96	9.00	1.13	2.19	3.70	6.00	9.50	14.84
182	6.43	6.69	1.04	2.00	3.14	4.93	7.66	11.74
183	4.57	5.49	1.20	2.00	2.36	3.74	5.75	8.31
188	7.48	8.34	1.11	1.56	3.00	5.31	9.21	15.08
197 2/	10.46	8.47	0.81	4.52	5.97	8.39	12.25	17.86
198	6.51	3.30	0.51	3.55	4.39	5.76	7.73	10.33
209 2/	12.50	9.15	0.73	6.93	8.63	10.88	14.05	18.29
210 2/	15.21	14.45	0.95	6.77	8.96	12.08	16.80	25.21
211	11.42	8.10	0.71	5.74	7.69	10.15	13.25	17.18
236	10.15	14.64	1.44	2.31	4.32	7.31	11.84	19.16
239	10.36	11.22	1.08	2.88	4.69	7.72	12.52	20.36
243	7.00	7.35	1.05	1.95	3.12	5.55	8.88	13.32
277	9.03	9.92	1.10	3.29	4.76	7.11	10.56	15.85
294	7.70	10.83	1.41	2.66	3.97	6.04	8.96	13.46
296	8.78	13.50	1.54	2.24	3.96	6.14	10.10	16.42
297	5.75	8.73	1.52	1.71	2.73	4.28	6.63	10.15
316	9.38	10.08	1.07	1.59	3.77	7.00	11.75	18.84
320	8.79	8.99	1.02	3.06	4.60	6.90	10.31	15.34
321	6.29	6.01	0.96	2.53	3.67	5.28	7.47	10.52
336 2/	6.94	8.10	1.17	2.94	3.91	5.30	7.83	12.09
337 2/	4.59	3.44	0.75	2.54	3.20	4.16	5.33	6.94
395	6.51	8.43	1.29	1.91	2.68	4.77	7.88	12.45
410	3.47	3.53	1.02	0.88	1.59	2.72	4.44	5.91
416	10.66	11.04	1.04	1.78	5.08	8.48	13.05	20.08
429	14.21	24.28	1.71	2.83	4.94	8.73	15.64	26.82
430	16.84	15.80	0.94	3.42	7.02	13.26	22.21	33.75
442 2/	10.27	16.83	1.64	1.62	2.52	6.18	12.63	23.07
462	22.59	16.16	0.72	7.33	12.20	19.18	29.19	41.11
468	17.51	23.15	1.32	2.58	6.58	12.23	21.09	35.11
475	14.47	15.74	1.09	2.55	6.29	11.34	18.36	27.86

1/ Based on frequency of occurrence. Definitions of DRG code numbers are given in Appendix B.

2/ Represents surgical DRGs.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 35

Number of discharges, total days of care, and program payments for Medicare beneficiaries discharged from short-stay hospitals, by the 33 leading principal diagnoses within major classification: Calendar year 1988

Principal ICD-9-CM diagnosis 1/ within major classification	Principal ICD-9-CM codes	Discharges		Days of care		Program payments		
		Number	Per 1,000 enrollees	Total	Per discharge	Amount in thousands	Per discharge	Per day
Total	—	10,256,235	316	90,873,365	8.9	$46,879,488	$4,571	$516
The 33 leading diagnoses 2/	—	4,040,695	125	32,239,400	8.0	16,619,298	4,113	515
Infectious and parasitic diseases (001-139)								
Total	—	187,755	6	2,074,585	11.0	1,059,535	5,643	511
Neoplasms (140-239)								
Total	—	816,270	25	8,569,100	10.5	4,873,679	5,971	569
Malignant neoplasm of prostate 3/	185	84,405	3	597,670	7.1	290,128	3,437	485
Residual	—	731,865	23	7,971,430	10.9	4,583,551	6,263	575
Endocrine, nutritional, and metabolic diseases and immunity disorders (240-279)								
Total	—	431,710	13	3,906,350	9.0	1,580,859	3,662	405
Diabetes with unspecified complication, type 1, insulin dependent	250.91	49,625	2	385,425	7.8	134,143	2,703	348
Disorders of fluid, electrolyte, and acid-base balance, volume depletion	276.5	145,160	4	1,319,840	9.1	481,734	3,319	365
Residual	—	236,925	7	2,201,085	9.3	964,982	4,073	438
Diseases of the blood and blood forming organs (280-289)								
Total	—	102,525	3	755,915	7.4	334,483	3,262	442
Mental disorders (290-319)								
Total	—	326,680	10	4,690,390	14.4	1,229,967	3,765	262
Diseases of the nervous system and sense organs (320-389)								
Total	—	235,840	7	1,629,620	6.9	758,223	3,215	465
Diseases of the circulatory system (390-459)								
Total	—	2,998,295	93	24,824,445	8.3	14,551,308	4,853	586
Acute myocardial infarction of other anterior wall	410.1	76,465	2	728,615	9.5	436,912	5,714	600
Acute myocardial infarction of other interior wall	410.4	73,845	2	681,470	9.2	410,095	5,553	602
Subendocardial infarction	410.7	68,415	2	655,025	9.6	390,469	5,707	596
Intermediate coronary syndrome	411.1	324,495	10	1,994,395	6.1	1,314,969	4,052	659
Other and unspecified angina pectoris	413.9	144,810	4	665,890	4.6	388,576	2,683	584
Coronary atherosclerosis	414.0	171,435	5	1,387,055	8.1	1,661,397	9,691	1,198
Cardiac dysrhythmias, atrial fibrillation	427.31	103,475	3	617,525	6.0	291,573	2,818	472
Other specified cardiac dysrhythmias-other	427.89	49,525	2	285,985	5.8	149,850	3,026	524
Congestive heart failure	428.0	529,700	16	4,587,360	8.7	2,086,005	3,938	455
Cerebral artery occlusion, unspecified	434.9	149,650	5	1,852,785	12.4	758,445	5,068	409
Unspecified transient cerebral ischemia	435.9	116,480	4	692,035	5.9	243,278	2,089	352
Acute, but ill-defined, cerebrovascular disease	436	98,075	3	960,085	9.8	403,711	4,116	420
Residual	—	1,091,925	34	9,716,220	8.9	6,016,058	5,510	619

See footnotes at end of table.

Table 35—Continued

Number of discharges, total days of care, and program payments for Medicare beneficiaries discharged from short-stay hospitals, by the 33 leading principal diagnoses within major classification: Calendar year 1988

Principal ICD-9-CM diagnosis 1/ within major classification	Principal ICD-9-CM codes	Discharges		Days of care		Program payments		
		Number	Per 1,000 enrollees	Total	Per discharge	Amount in thousands	Per discharge	Per day
Diseases of the respiratory system (460-519)								
Total	—	1,137,295	35	10,635,410	9.4	$5,488,833	$4,826	$516
Acute bronchitis	466.0	154,455	5	1,166,430	7.6	488,056	3,160	418
Pneumonia, organism unspecified	486	306,435	9	2,838,775	9.3	1,317,448	4,299	464
Asthma, unspecified, w/o mention of asthmaticus	493.90	66,935	2	468,800	7.0	204,650	3,057	437
Chronic airway obstruction, NEC	496	60,175	2	510,170	8.5	253,499	4,213	497
Respiratory failure	518.81	73,210	2	971,950	13.3	694,501	9,486	715
Residual	—	476,085	15	4,679,285	9.8	2,530,679	5,316	541
Diseases of the digestive system (520-579)								
Total	—	1,152,345	36	9,445,180	8.2	4,843,714	4,203	513
Other and unspecified noninfectious gastroenteritis and colitis	558.9	58,465	2	332,005	5.7	124,235	2,125	374
Diverticulitis of colon	562.11	66,820	2	626,410	9.4	285,561	4,274	456
Calculus of gallbladder with acute cholecystitis, w/o mention of obstruction	574.00	47,720	1	452,175	9.5	238,629	5,001	528
Calculus of gallbladder with other cholecystitis, w/o mention of obstruction	574.10	68,250	2	549,115	8.0	335,732	4,919	611
Hemorrhage of gastrointestinal tract, unspecified	578.9	75,120	2	556,950	7.4	266,920	3,553	479
Residual	—	835,970	26	6,928,525	8.3	3,592,637	4,298	519
Diseases of the genitourinary system (580-629)								
Total	—	678,530	21	4,863,555	7.2	2,396,646	3,532	493
Urinary tract infection, site not specified	599.0	149,890	5	1,373,695	9.2	547,057	3,650	398
Hyperplasia of prostate 3/	600	185,560	13	1,050,405	5.7	521,761	2,812	497
Residual	—	343,080	11	2,439,455	7.1	1,327,828	3,870	544
Diseases of the skin and subcutaneous tissue (680-709)								
Total	—	159,545	5	1,905,140	11.9	789,524	4,949	414
Other cellulitis and abscess-leg, except foot	682.6	49,010	2	488,780	10.0	183,672	3,748	376
Residual	—	110,535	3	1,416,360	12.8	605,852	5,481	428
Diseases of the musculoskeletal system and connective tissue (710-739)								
Total	—	447,075	14	4,192,115	9.4	2,268,948	5,075	541
Congenital anomalies (740-759)								
Total	—	8,125	(4/)	65,605	8.1	48,564	5,977	740
Symptoms, signs, and ill-defined conditions (780-799)								
Total	—	493,100	15	2,800,255	5.7	1,289,653	2,615	461
Syncope and collapse	780.2	102,865	3	562,550	5.5	227,924	2,216	405
Chest pain, unspecified	786.50	106,930	3	387,130	3.6	187,463	1,753	484
Residual	—	283,305	9	1,850,575	6.5	874,266	3,086	472

See footnotes at end of table.

Table 35—Continued

Number of discharges, total days of care, and program payments for Medicare beneficiaries discharged from short-stay hospitals, by the 33 leading principal diagnoses within major classification: Calendar year 1988

Principal ICD-9-CM diagnosis 1/ within major classification	Principal ICD-9-CM codes	Discharges		Days of care		Program payments		
		Number	Per 1,000 enrollees	Total	Per discharge	Amount in thousands	Per discharge	Per day
Injury and poisoning (800-999)								
Total	—	795,350	25	7,854,600	9.9	$4,251,909	$5,346	$541
Fracture of neck of femur, other	820.09	52,910	2	712,275	13.5	405,602	7,666	569
Fracture of nect of femur, pertrochanteric fracture closed, intertrochanteric section	820.21	90,150	3	1,282,895	14.2	633,864	7,031	494
Residual	—	652,290	20	5,859,430	9.0	3,212,443	4,925	548
Supplementary classifications of factors influencing health status and contact with health services (V01-V82)								
Total	—	280,090	9	2,638,280	9.4	1,104,316	3,943	419
Maintenance chemotherapy	V58.1	140,235	4	497,730	3.5	261,469	1,865	525
Residual	—	139,855	4	2,140,550	15.3	842,847	6,027	394

1/ ICD-9-CM denotes *International Classification of Diseases, 9th Revision, Clinical Modification (Volume 1).* W/O denotes without. NEC denotes not elsewhere classifiable. Although as many as five ICD-9-CM codes are reported on the HCFA-1450, only the principal diagnosis code has been used in this report.
2/ Based on frequency of occurrence.
3/ Only the male population used to calculate discharges per 1,000 enrollees.
4/ Less than 1 discharge per 1,000 enrollees.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 36

Number of discharges with surgery, total days of care, and program payments for Medicare beneficiaries discharged from short-stay hospitals, by the 33 leading surgical procedures within major classification: Calendar year 1988

Principal ICD-9-CM 1/ surgical procedure within major classification	Principal ICD-9-CM codes	Discharges with surgery		Days of care		Program payments		
		Number	Per 1,000 enrollees	Total	Per discharge	Amount in thousands	Per discharge	Per day
Total	—	6,369,155	196	63,772,585	10.0	$35,558,887	$5,583	$558
33 leading surgical procedures 2/	—	1,494,165	46	16,235,815	10.9	10,869,179	7,274	669
Operations on:								
Nervous system (01-05)								
Total	—	134,235	4	1,760,170	13.1	1,005,695	7,492	571
Other exploration and decompression of spinal canal	03.09	27,545	1	328,490	11.9	182,751	6,635	556
Residual	—	106,690	3	1,431,680	13.4	822,944	7,713	575
Endocrine system (06-07)								
Total	—	17,015	1	122,845	7.2	79,376	4,665	646
Eye (08-16)								
Total	—	94,130	3	312,680	3.3	243,044	2,582	777
Other extracapsular extraction of lens	13.59	22,660	1	63,885	2.8	53,183	2,347	832
Residual	—	71,470	2	248,795	3.5	189,861	2,657	763
Ear (18-20)								
Total	—	9,255	(3/)	40,435	4.4	24,942	2,695	617
Nose, mouth, and pharynx (21-29)								
Total	—	50,660	2	309,035	6.1	172,223	3,400	557
Respiratory system (30-34)								
Total	—	249,845	8	3,825,505	15.3	2,143,133	8,578	560
Closed endoscopic biopsy of lung	33.27	24,005	1	321,900	13.4	194,132	8,087	603
Residual	—	225,840	7	3,503,605	15.5	1,949,001	8,630	556
Cardiovascular system (35-39)								
Total	—	952,440	29	9,419,465	9.9	8,216,336	8,627	872
Single vessel percutaneous transluminal coronary angioplasty without mention of thrombolytic agent	36.01	58,640	2	377,100	6.4	417,453	7,119	1,107
Aortocoronary bypass of two coronary arteries	36.12	24,250	1	364,775	15.0	471,458	19,442	1,292
Aortocoronary bypass of three coronary arteries	36.13	35,720	1	553,275	15.5	700,237	19,603	1,266
Aortocoronary bypass of four or more coronary arteries	36.14	34,220	1	535,120	15.6	660,987	19,316	1,235
Endarterectomy of other vessels of head and neck	38.12	47,605	1	372,890	7.8	262,058	5,505	703

See footnotes at end of table.

Table 36—Continued

Number of discharges with surgery, total days of care, and program payments for Medicare beneficiaries discharged from short-stay hospitals, by the 33 leading surgical procedures within major classification: Calendar year 1988

Principal ICD-9-CM 1/ surgical procedure within major classification	Principal ICD-9-CM codes	Discharges with surgery		Days of care		Program payments		
		Number	Per 1,000 enrollees	Total	Per discharge	Amount in thousands	Per discharge	Per day
Cardiovascular system (35-39), con't.								
Resection of vessel with replacement, abdominal aorta	38.44	25,340	1	373,980	14.8	$325,978	$12,864	$872
Arteriovenostomy for renal dialysis	39.27	18,615	1	250,165	13.4	180,887	9,717	723
Other (peripheral) vascular shunt or bypass	39.29	44,915	1	678,240	15.1	557,635	12,415	822
Other revision of vascular procedure	39.49	19,855	1	156,385	7.9	148,755	7,492	951
Residual	—	643,280	20	5,757,535	9.0	4,490,888	6,981	780
Hemic and lymphatic system (40-41)								
Total	—	74,410	2	894,690	12.0	425,132	5,713	475
Digestive system (42-54)								
Total	—	1,186,745	37	13,187,095	11.1	6,970,258	5,873	529
Local excision of lesion or tissue of large intestine	45.41	17,395	1	164,650	9.5	90,158	5,183	548
Right hemicolectomy	45.73	34,970	1	550,635	15.7	380,476	10,880	691
Sigmoidectomy	45.76	33,000	1	514,420	15.6	346,194	10,491	673
Total cholecystectomy	51.22	135,690	4	1,395,420	10.3	803,221	5,920	576
Repair of direct inguinal hernia	53.01	22,960	1	82,310	3.6	45,912	2,000	558
Repair of indirect inguinal hernia	53.02	26,380	1	94,875	3.6	51,181	1,940	539
Lysis of peritoneal adhesions	54.5	21,470	1	331,505	15.4	199,000	9,269	600
Residual	—	894,880	28	10,053,280	11.2	5,054,116	5,648	503
Urinary system (55-59)								
Total	—	271,995	8	2,386,710	8.8	1,299,891	4,779	545
Other transurethral excision or destruction of lesion or tissue of bladder	57.49	52,335	2	282,300	5.4	153,261	2,928	543
Residual	—	219,665	7	2,104,410	9.6	1,146,630	5,220	545
Male genital organs (60-64) 4/								
Total	—	298,900	9	2,026,385	6.8	1,036,626	3,468	512
Transurethral prostatectomy	60.2	236,490	7	1,568,035	6.6	768,700	3,250	490
Residual	—	62,410	2	458,350	7.3	267,926	4,293	585
Female genital organs (65-71) 5/								
Total	—	104,460	6	758,245	7.3	402,094	3,849	530
Total abdominal hysterectomy	68.4	32,440	2	258,910	8.0	140,902	4,343	544
Vaginal hysterectomy	68.5	21,115	1	126,465	6.0	64,527	3,056	510
Residual	—	50,905	3	372,870	7.3	196,665	3,863	527
Obstetrical procedures (72-75)								
Total	—	3,515	(3/)	14,365	4.1	5,972	1,699	416

See footnotes at end of table.

Table 36—Continued

Number of discharges with surgery, total days of care, and program payments for Medicare beneficiaries discharged from short-stay hospitals, by the 33 leading surgical procedures within major classification: Calendar year 1988

Principal ICD-9-CM 1/ surgical procedure within major classification	Principal ICD-9-CM codes	Discharges with surgery		Days of care		Program payments		
		Number	Per 1,000 enrollees	Total	Per discharge	Amount in thousands	Per discharge	Per day
Musculoskeletal system (76-84)								
Total	—	653,270	20	7,956,935	12.2	$4,438,981	$6,795	$558
Open reduction of fracture with internal fixation, femur	79.35	112,230	3	1,629,555	14.5	810,250	7,220	497
Open reduction of fracture with internal fixation of tibia and fibula	79.36	15,850	(3/)	135,135	8.5	67,794	4,277	502
Excision of intervertebral disc	80.51	30,160	1	310,195	10.3	177,485	5,885	572
Total knee replacement	81.41	77,130	2	893,025	11.6	648,027	8,402	726
Total hip replacement with use of methyl methacrylate	81.51	36,755	1	471,215	12.8	319,157	8,683	677
Other total hip replacement	81.59	44,230	1	575,775	13.0	372,270	8,417	647
Other amputation below knee	84.15	17,115	1	371,245	21.7	175,079	10,230	472
Amputation above knee	84.17	20,510	1	391,515	19.1	194,120	9,465	496
Residual	—	299,290	9	3,179,275	10.6	1,674,799	5,596	527
Integumentary system (85-86)								
Total	—	244,995	8	3,049,940	12.4	1,505,634	6,146	$494
Unilateral extended simple mastectomy	85.43	52,330	2	296,860	5.7	154,990	2,962	522
Debridement of wound, infection, or burn 6/	86.22	70,245	2	1,415,565	20.2	750,961	10,691	531
Residual	—	122,420	4	1,337,515	10.9	599,683	4,899	448
Miscellaneous diagnostic and therapeutic procedures (87-99)								
Total	—	2,023,285	62	17,708,085	8.8	7,589,551	3,751	429

1/ ICD-9-CM denotes *International Classification of Diseases, 9th Revision, Clinical Modification (Volume 3)*.
2/ Some procedures may have been more frequently reported than were the leading procedures, but were excluded because they were not performed in an operating room. Although as many as three ICD-9-CM procedure codes are reported on the HCFA form 1450, only the principal procedure code has been used in this report.
3/ Less than 1 discharge per 1,000 enrollees.
4/ Only the male population used to calculate discharge rate per 1,000 enrollees.
5/ Only the female population used to calculate discharge rate per 1,000 enrollees.
6/ Effective October 1, 1988, the ICD-9-CM code was retitled to *Excisional debridement of wound, infection, or burn.*

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 37

Number of short-stay hospital discharges, total days of care, and program payments for all inpatient Medicare beneficiaries, by total days of care: Calendar year 1988

Total days of care	Discharges		Total days of care			Program payments		
	Number	Percent	Number	Percent	Per discharge	Amount in thousands	Percent	Per discharge
Total	10,256,945	100.0	91,238,280	100.0	8.9	$46,895,329	100.0	$4,572
1 day	702,775	6.9	702,775	0.8	1.0	1,654,855	3.5	2,355
2 days	910,130	8.9	1,820,260	2.0	2.0	2,162,771	4.6	2,376
3 days	1,013,220	9.9	3,039,660	3.3	3.0	2,617,451	5.6	2,583
4 days	1,033,440	10.1	4,133,760	4.5	4.0	2,898,358	6.2	2,805
5 days	919,145	9.0	4,595,725	5.0	5.0	2,848,620	6.1	3,099
6 days	786,070	7.7	4,716,420	5.2	6.0	2,703,495	5.8	3,439
7 days	723,745	7.1	5,066,215	5.6	7.0	2,809,558	6.0	3,882
8 days	624,010	6.1	4,992,080	5.5	8.0	2,786,979	5.9	4,466
9 days	516,650	5.0	4,649,850	5.1	9.0	2,562,949	5.5	4,961
10 days	437,100	4.3	4,371,000	4.8	10.0	2,322,810	5.0	5,314
11 days	359,830	3.5	3,958,130	4.3	11.0	2,035,762	4.3	5,658
12 days	292,710	2.9	3,512,520	3.8	12.0	1,733,017	3.7	5,921
13 days	242,670	2.4	3,154,710	3.5	13.0	1,498,453	3.2	6,175
14 days	217,040	2.1	3,038,560	3.3	14.0	1,374,119	2.9	6,331
15 days	182,095	1.8	2,731,425	3.0	15.0	1,224,892	2.6	6,727
16 days	146,730	1.4	2,347,680	2.6	16.0	1,026,017	2.2	6,993
17 days	122,350	1.2	2,079,950	2.3	17.0	883,251	1.9	7,219
18 days	104,665	1.0	1,883,970	2.1	18.0	775,280	1.7	7,407
19 days	88,070	0.9	1,673,330	1.8	19.0	671,862	1.4	7,629
20 days	77,570	0.8	1,551,400	1.7	20.0	609,257	1.3	7,854
21 to 30 days	437,700	4.3	10,758,150	11.8	24.6	3,975,270	8.5	9,082
31 to 40 days	153,960	1.5	5,350,645	5.9	34.8	1,937,449	4.1	12,584
41 to 50 days	70,060	0.7	3,146,230	3.4	44.9	1,199,457	2.6	17,120
51 to 60 days	35,375	0.3	1,945,295	2.1	55.0	755,601	1.6	21,360
61 to 90 days	37,980	0.4	2,735,250	3.0	72.0	1,042,514	2.2	27,449
91 to 150 days	15,645	0.2	1,759,830	1.9	112.5	563,837	1.2	36,039
151 days and more 1/	6,210	0.1	1,523,460	1.7	245.3	221,443	0.5	35,659

1/ Any days of care over 150 days during a single stay would represent days not covered by Medicare.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 38

Type of short-stay hospital accommodation and ancillary services for Medicare beneficiaries, number of discharges, and amount of total charges, by total days of care: Calendar year 1988

Total days of care	All services	Type of accomodation		Type of ancillary service								
		Routine	Intensive/ coronary care	Total	Operating room	Pharmacy	Laboratory	Radiology	Supply	Anesthesia	Inhalation therapy	Other 1/
						Number of discharges						
Total	10,234,945	9,602,180	2,609,050	10,088,800	3,258,870	9,970,115	9,934,915	8,859,250	9,615,455	2,446,420	6,173,315	8,133,320
1 to 8 days	6,767,860	6,238,905	1,442,250	6,667,180	1,772,680	6,576,945	6,538,145	5,617,485	6,321,445	1,316,470	3,666,915	5,044,865
9 to 20 days	2,740,820	2,654,265	873,575	2,708,650	1,118,805	2,687,160	2,689,970	2,568,035	2,613,550	856,710	1,970,645	2,411,455
21 to 30 days	427,845	417,545	162,330	421,590	202,100	418,065	418,115	396,465	402,480	151,380	311,535	395,520
31 to 40 days	149,050	145,590	61,260	146,225	77,070	144,860	145,050	138,140	139,710	57,330	110,160	140,315
41 to 50 days	66,485	65,075	28,810	64,925	36,740	64,165	64,345	61,650	61,835	27,125	49,450	62,810
51 to 60 days	33,655	32,785	15,585	32,785	19,700	32,350	32,440	31,480	31,205	14,415	25,600	31,815
61 to 90 days	36,050	35,235	17,995	34,785	22,915	34,270	34,365	33,665	33,250	16,575	28,280	34,050
91 to 150 days	13,180	12,780	7,245	12,660	8,860	12,300	12,485	12,330	11,980	6,415	10,730	12,480
						Amount of total charges in thousands						
Total	$78,646,619	$21,817,296	$6,449,359	$50,150,549	$4,974,623	$11,151,090	$11,895,880	$4,503,966	$7,436,173	$816,714	$5,126,913	$4,476,710
1 to 8 days	26,908,982	6,994,952	1,931,731	17,891,914	2,045,553	3,372,038	4,954,507	1,924,883	2,579,906	350,905	1,371,495	1,383,894
9 to 20 days	29,671,898	8,283,404	2,387,558	18,968,014	2,094,010	4,236,317	4,249,893	1,623,964	3,006,226	328,802	1,939,602	1,522,233
21 to 30 days	9,011,446	2,688,327	792,743	5,518,741	417,515	1,438,380	1,178,178	438,939	754,274	67,617	671,814	563,667
31 to 40 days	4,580,498	1,363,136	429,302	2,782,020	176,202	757,674	567,087	202,359	374,717	29,213	366,455	314,979
41 to 50 days	2,691,463	797,742	264,654	1,621,755	89,847	458,180	317,292	110,090	216,916	15,037	224,144	197,562
51 to 60 days	1,689,789	491,794	182,308	1,009,753	52,242	282,021	195,665	65,705	144,764	8,660	146,394	120,237
61 to 90 days	2,550,098	738,758	295,496	1,494,670	69,304	398,233	281,226	92,460	221,142	11,206	248,058	194,216
91 to 150 days	1,542,444	459,184	165,568	863,683	29,953	208,247	152,031	45,566	138,227	5,275	158,951	179,922
						Percent distribution of total charges						
Total	100.0	27.7	8.2	64.0	6.3	14.2	15.1	5.7	9.5	1.0	6.5	5.7
1 to 8 days	100.0	26.0	7.2	66.8	7.6	12.5	18.4	7.2	9.6	1.3	5.1	5.1
9 to 20 days	100.0	27.9	8.0	64.1	7.1	14.3	14.3	5.5	10.1	1.1	6.5	5.1
21 to 30 days	100.0	29.8	8.8	61.4	4.6	16.0	13.1	4.9	8.4	0.8	7.5	6.3
31 to 40 days	100.0	29.8	9.4	60.8	3.8	16.5	12.4	4.4	8.2	0.6	8.0	6.9
41 to 50 days	100.0	29.6	9.8	60.6	3.3	17.0	11.8	4.1	8.1	0.6	8.3	7.3
51 to 60 days	100.0	29.1	10.8	60.1	3.1	16.7	11.6	3.9	8.6	0.5	8.7	7.1
61 to 90 days	100.0	29.0	11.6	59.4	2.7	15.6	11.0	3.6	8.7	0.4	9.7	7.6
91 to 150 days	100.0	18.8	6.5	34.7	1.2	8.2	6.0	1.8	5.4	0.2	6.2	7.1

See footnote at end of table.

Table 38--Continued

Type of short-stay hospital accommodation and ancillary services for Medicare beneficiaries, number of discharges, and amount of total charges, by total days of care: Calendar year 1988

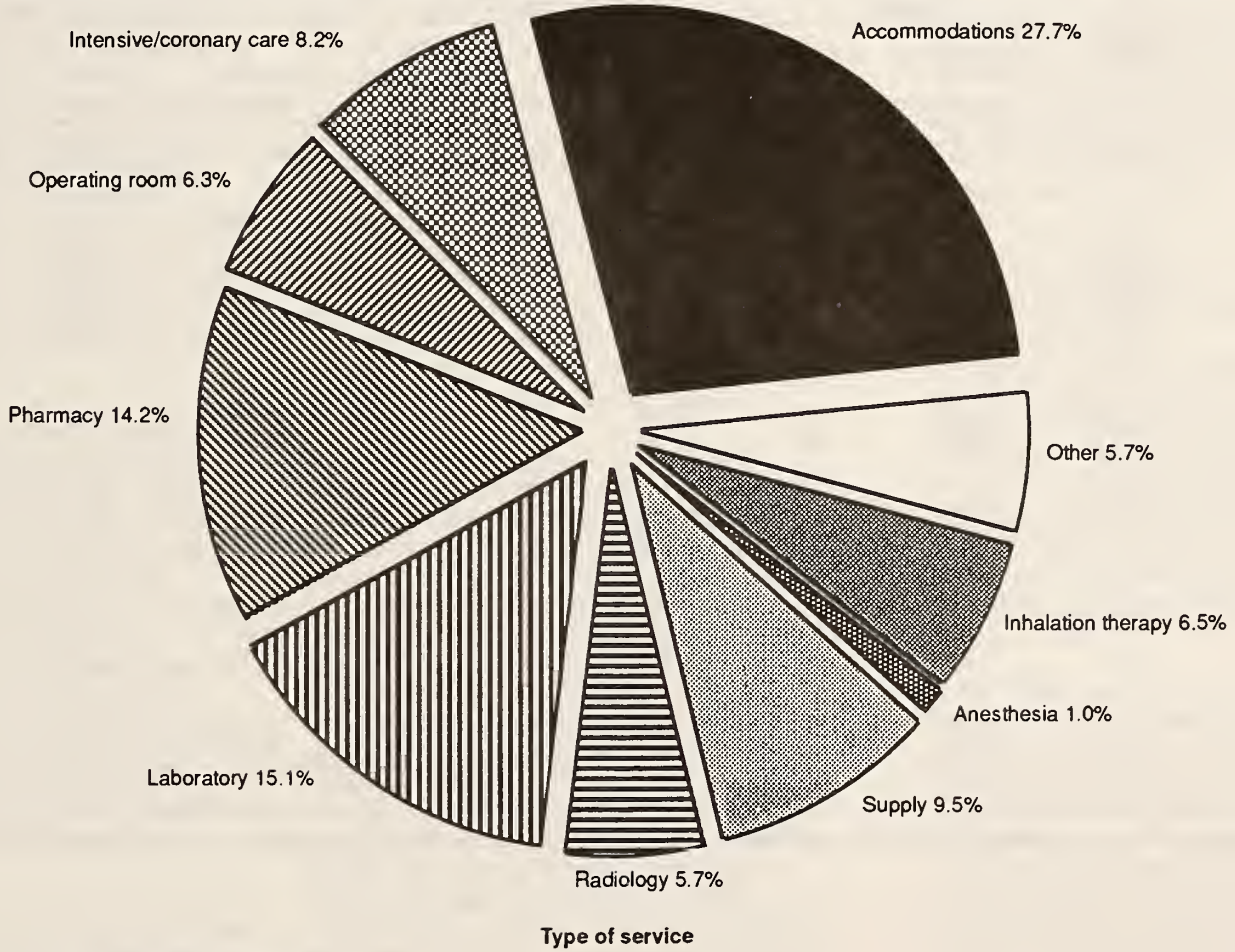
Total days of care	All services	Type of accomodation		Type of ancillary service								
		Routine	Intensive/ coronary care	Total	Operating room	Pharmacy	Laboratory	Radiology	Supply	Anesthesia	Inhalation therapy	Other 1/
				Average total charges per discharge								
Total	$7,684	$2,272	$2,472	$4,971	$1,526	$1,118	$1,197	$508	$773	$334	$830	$550
1 to 8 days	3,976	1,121	1,339	2,684	1,154	513	758	343	408	267	374	274
9 to 20 days	10,826	3,121	2,733	7,003	1,872	1,577	1,580	632	1,150	384	984	631
21 to 30 days	21,062	6,438	4,884	13,090	2,066	3,441	2,818	1,107	1,874	447	2,156	1,425
31 to 40 days	30,731	9,363	7,008	19,026	2,286	5,230	3,910	1,465	2,682	510	3,327	2,245
41 to 50 days	40,482	12,259	9,186	24,979	2,445	7,141	4,931	1,786	3,508	554	4,533	3,145
51 to 60 days	50,209	15,001	11,698	30,799	2,652	8,718	6,032	2,087	4,639	601	5,719	3,779
61 to 90 days	70,738	20,967	16,421	42,969	3,024	11,620	8,184	2,746	6,651	676	8,771	5,704
91 to 150 days	117,029	35,930	22,853	68,221	3,381	16,931	12,177	3,696	11,538	822	14,814	14,417

1/ Includes services such as physical therapy, occupational therapy, blood and other blood components, etc.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Figure 11

Percent distribution of Medicare short-stay hospital charges, by type of service: Calendar year 1988



NOTE: Total charges = $78.6 billion.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 39

Number of enrollees, number of discharges, total days of care, and program payments for Medicare beneficiaries discharged from short-stay hospitals, by selected demographic characteristics: Calendar year 1988

Demographic characteristics	Total number of enrollees in thousands	Discharges		Total days of care			Program payments			
		Number in thousands	Rate per 1,000 enrollees	Number in thousands	Percent	Per discharge	Amount in millions	Percent	Per discharge	Per day
Total	32,413	10,257	316	91,238	100.0	8.9	$46,895	100.0	$4,572	$514
Age										
Less than 65 years	3,101	1,110	358	9,972	10.9	9.0	4,959	10.6	4,469	497
65-69 years	9,311	2,054	221	16,539	18.1	8.0	9,402	20.0	4,576	568
70-74 years	7,605	2,157	284	18,425	20.2	8.5	10,108	21.6	4,686	549
75-79 years	5,650	1,974	349	17,824	19.5	9.0	9,168	19.6	4,644	514
80-84 years	3,659	1,508	412	14,184	15.5	9.4	6,782	14.5	4,497	478
85 years and over	3,086	1,453	471	13,295	14.6	9.8	6,477	13.8	4,456	453
Sex										
Male	13,773	4,632	336	39,954	43.8	8.6	21,735	46.3	4,692	544
Female	18,640	5,625	302	51,284	56.2	9.1	25,160	53.7	4,473	491
Race 1/										
White	28,147	8,893	316	77,829	85.3	8.7	40,064	85.4	4,505	515
Other	3,312	1,078	325	10,869	11.9	10.1	5,514	11.8	5,113	507
Medicare status										
Aged	29,172	9,079	310	80,611	88.4	8.9	41,519	88.5	4,573	515
Disabled	3,101	976	315	8,802	9.6	9.0	4,051	8.6	4,151	460
ESRD	140	202	1,443	1,825	2.0	9.0	1,325	2.8	6,567	726
MSA 2/										
Urban	23,149	7,292	315	68,366	74.9	9.4	36,364	77.5	4,987	532
Rural	8,518	2,965	348	22,873	25.1	7.7	10,532	22.5	3,552	460

1/ Excludes unknown race.

2/ Represents metropolitan statistical area. Refer to Glossary for definition of urban and rural classifications. Unknown MSAs are included in the urban enrollment.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

VI. Summary of the hospital insurance benefit for skilled nursing facility services

The Medicare hospital insurance (HI or Part A) program covers post-hospital care in skilled nursing facilities (SNFs) certified to participate in Medicare. SNFs provide services to beneficiaries who no longer require the acute-care services provided by hospitals, but who still need general medical management and skilled nursing or rehabilitative care on a continuing basis. The SNF patient may receive a variety of services that include skilled nursing care; physical, speech, or occupational therapy; drugs; blood; medical supplies such as splints or casts; and the use of durable medical equipment.

The SNF benefit was intended as a less costly alternative to a continued hospital stay for post-acute medical or rehabilitation services. Thus, eligibility for 100 covered days of care under the SNF benefit is tied directly to a hospital stay of at least 3 days preceding admission to the SNF. Medicare covers the SNF admission only if the conditions requiring SNF care are the same conditions treated during the prior hospital stay. The program requires the attending physician to certify that the enrollee needs skilled nursing care, physical therapy, or speech therapy for these conditions. Transfer to an SNF must occur within 30 days of the hospital date of discharge (the original 14-day requirement was changed to 30 days).

The SNF benefit of 100 days of care is linked to the benefit period, or spell of illness, which begins the first day an enrollee uses hospital services and ends when the enrollee has not been an inpatient of a hospital or SNF for 60 consecutive days. At the beginning of each new benefit period, Medicare hospital insurance (HI) coverage is completely renewed, signaling the availability of an additional 100 covered days of SNF care for the enrollee.

Since 1967, Medicare has paid 100 percent of the reasonable costs for the first 20 days of covered SNF services. For the 21st through the 100th day, Medicare paid a part of the reasonable costs, but required the beneficiary to share the cost of the SNF services by paying a coinsurance amount equal to one-eighth of the HI deductible. If the beneficiary needed care that extended beyond 100 days during the benefit period, the beneficiary was responsible for all of the SNF charges.

Medicare program payments to SNFs have consistently represented a very small portion of all Medicare program payments. For example, in 1988 only about $1 of every $80 Medicare dollars was spent for SNF benefits. In fact, Medicare program payments to SNFs fell from 2.4 percent of total program payments in 1971 to 0.7 percent in 1987. However, due primarily to HCFA and congressional administrative and legislative initiatives, the proportion of SNF program payments to total program payments increased in 1988 to 1.2 percent.

An important law that affected the use of the SNF benefit was the Social Security Amendments of 1983 (Public Law 98-21), which established, effective October 1, 1983, the Medicare prospective payment system (PPS). Although PPS specifically concerns short-stay hospitals (SSHs), the ramifications of the law affected all providers furnishing post-hospital care. PPS gave SSHs an incentive to discharge patients as soon as medically feasible in their recovery period because Medicare SSH payments were predetermined prospectively for the entire stay, rather than based retrospectively on reasonable cost. Following the implementation of PPS, there has been a decrease in hospital length of stay and a corresponding increase in the transfer of hospital inpatients to SNFs.

The substantial increase in the use and cost of SNF services in 1988 was probably due, for the most part, to the following series of administrative or legislative actions:

- In April of 1988, HCFA adopted a new manual of administrative guidelines to clarify eligibility criteria for SNF benefits with the emphasis on what care is covered under the Medicare program. The guidelines stressed the importance of clear documentation to justify a denial of a claim for SNF coverage.
- Also in April 1988, new administrative arrangements for physical therapy and skilled nursing care were mandated by the U.S. District Court.
- In direct reference to 1988 SNF utilization, the repealed Medicare Catastrophic Coverage Act (MCCA) of 1988 (effective January 1, 1989) included a carryover provision that entitled a Medicare beneficiary residing in an SNF at the end of 1988 to automatically qualify for another 150 covered days of care during the same benefit period that carried over into 1989.
- In addition, MCCA encouraged changes in State Medicaid eligibility guidelines and regulations to permit the possible shifting of payment liability from Medicaid to Medicare.

Table 40: Trends in the use of Medicare short-stay inpatient hospital and skilled nursing facility services, and rates of change: Selected calendar years 1981-88

- Data for the period 1981-88 show the patterns of use for both SSHs and SNFs before and after the implementation of PPS. Although PPS specifically concerns SSHs, the ramifications of the law were expected to be felt by all providers furnishing post-hospital care.
- During 1988, about 4 percent (445,513) of all SSH discharges (10.3 million) resulted in a subsequent admission to a skilled nursing facility (SNF).
- The average covered days of care (CDOC) for Medicare SSH inpatients decreased 16 percent during the period 1981-88 (dropping from 10.1 days to 8.5 days).
- Conversely, SNF admissions as a percent of SSH discharges increased from 2.6 percent in 1981 to 4.3 percent in 1988.
- The average CDOC per SNF admission declined 26 percent during the 1981-87 period, decreasing from 29.2 days to 21.5 days, reflecting the increase in the SNF coinsurance amount.
- In 1987, for example, the SNF beneficiary coinsurance amount was $65 per day, which was nearly equivalent to the average amount ($77) reimbursed per day by the Medicare program.
- In 1988, however, the average CDOC per SNF admission rose to 26.5 days, reflecting the effects of the MCCA carryover provision that automatically entitled a Medicare beneficiary to an additional 150 CDOC for an SNF stay that began in 1988 and carried over into 1989.
- In summary, the implementation of PPS was followed by a general decline in the use of SSH benefits and a general increase in the use of SNF benefits.

Table 41: Trends in covered days of care, covered charges, and program payments for skilled nursing facility services used by Medicare hospital insurance beneficiaries, and total Medicare program payments, by type of enrollment: Selected calendar years 1971-88

- Medicare payments for SNF services rose from $179 million in 1971 to $964 million in 1988, an average annual rate of growth of 10.4 percent.
- The bulk of this increase occurred between 1987 and 1988 when SNF program payments jumped from $544 million to $964 million, a 77 percent increase.
- This significant increase in program payments reflects, for the most part, both the April 1988 implementation of administrative guidelines to clarify coverage of SNF benefits related to levels of care and the carryover provision of MCCA.
- The widening divergence in SNF covered charges and program payments during the period 1971-88 (Figure 12) was probably due, in general, to increases in beneficiary coinsurance liability. That is, beneficiary liability represented a progressively larger proportion of the total SNF expenditures (program payments plus beneficiary coinsurance payments).
- Medicare SNF payments as a percent of all Medicare program payments dropped from 2.4 percent in 1971 to 1.2 percent in 1988.
- The number of CDOC for SNF admissions increased from 7.5 million days in 1971 to 9.0 million in 1983, and then fell to 7.0 million days in 1987.
- In 1988, however, the number of SNF CDOC jumped to 11.8 million days, an increase of 68 percent.
- The average SNF payment per day increased from $24 a day in 1971 to $82 in 1988.

Table 42: Number of covered admissions, covered days of care, covered charges, and program payments for skilled nursing facility services used by Medicare hospital insurance beneficiaries, by type of entitlement and covered days of care: Calendar year 1988

- Beneficiaries receiving SNF services used 11.8 million CDOC, an average of 26.5 days per admission.
- Aged beneficiaries used 26.4 CDOC per admission; disabled beneficiaries used 29.1.
- Program payments for all beneficiaries amounted to $964.1 million, an average of $2,164 per admission and $82 per CDOC.
- Average program payments per admission for aged beneficiaries were $2,151; for the disabled, $2,533. Program payments per day were $81 for the aged and $87 for the disabled.
- Almost 60 percent (269,290) of all SNF admissions involved stays of less than 21 days; 27 percent (119,151) involved less than 9 days.
- Stays lasting more than 80 days accounted for 31,407 SNF admissions, or 7 percent of all Medicare covered SNF admissions; 1,417 of these admissions were for the disabled.
- Program payments for SNF stays with more than 80 CDOC amounted to $226 million, an average of $7,183 per admission ($7,136 for the aged and $8,189 for the disabled).
- For beneficiaries who used more than 80 CDOC, Medicare paid, on average, $63 per day for the aged and $69 for the disabled.
- In contrast, program payments for aged beneficiaries using 1-8 CDOC were $116 per day and for the disabled, $129.
- For stays greater than 20 days, the average Medicare payment was about $72 per CDOC.

Table 43: Covered admissions, covered days of care, covered charges, and program payments for skilled nursing facility services used by Medicare hospital insurance beneficiaries, by area of residence: Calendar year 1988

- In 1988, the rate of covered admissions to Medicare-participating SNFs varied widely, ranging from about 10 admissions per 1,000 enrollees in the South and Northeast Regions to about 19 per 1,000 in the West and North Central Regions.
- The highest number of covered days of care (CDOC) per 1,000 enrollees for SNF services was reported in the North Central Region (3,643 days); the lowest, in the West Region (2,309 days).
- The average number of CDOC per admission ranged from 21.0 days in the West Region to 37.5 days in the Northeast.
- Average program payments per SNF admission were lowest in the South Region ($1,992) and highest in the Northeast Region ($2,574).
- The highest average covered program payment per day ($109) was recorded for the West Region, nearly 58 percent greater than that reported for the Northeast Region ($69).
- Among the States, Oklahoma had the lowest average CDOC (14.1) per admission, and New York had the highest (45.1).
- The average SNF program payment per day ranged from $47 in Michigan to $174 in Oklahoma, a difference of 270 percent.

Table 44: Number of covered admissions, covered days of care,covered charges, and program payments for skilled nursing facility services used by Medicare hospital insurance beneficiaries, by demographic characteristics: Calendar year 1988

- The number of covered admissions per 1,000 enrollees increased with advancing age. For various age cohorts under 75 years of age, admissions ranged from 3 to 10 per 1,000 enrollees.
- Medicare beneficiaries in the 75-79 age group were admitted at a rate of 16 per 1,000 enrollees.
- In the group of enrollees 80-84 years of age, the admission rate per 1,000 climbed to 28; and for beneficiaries 85 years of age or over, the rate was 47 per 1,000 enrollees.
- Excluding beneficiaries under 65 years of age, the CDOC rate per 1,000 enrollees rose with advancing age. For beneficiaries 80-84 years of age, the CDOC rate (739) was twice as high as that for all beneficiaries (364).
- For beneficiaries 85 years of age or over, the CDOC rate (1,279) per 1,000 was more than 16 times higher than that for beneficiaries 65-66 years of age (77).
- Females averaged 27.4 CDOC per SNF admission, or 11 percent more than males, who averaged 24.6 days.
- Disabled enrollees under 65 years of age had the highest program payments per admission ($2,534) of any age group, about 17 percent above the national average ($2,164).
- Fourteen per 1,000 white enrollees were admitted to SNFs in 1988; the rate for other enrollees was 10 per 1,000.
- Beneficiaries of the white race had shorter average stays per admission (26.1 days) than did those of other races (30.9 days), but had a CDOC rate per 1,000 enrollees that was 20 percent greater than those of other races.

Table 45: Number of covered admissions and days of care, covered charges, and program payments for skilled nursing facility services used by Medicare hospital insurance beneficiaries, by 12 selected principal admitting diagnoses: Calendar year 1988

- The 12 selected principal diagnoses for SNF patients accounted for 185,238 admissions, or nearly 42 percent of all SNF admissions (445,513) and 42 percent ($407.1 million) of all SNF program payments ($964.1 million).
- Of the 12 selected diagnoses, the average CDOC per admission ranged from 17.8 days for malignant neoplasm of trachea, bronchus, and lung (ICD-9-CM code 162) to 40.9 days for diabetes mellitus (ICD-9-CM code 250).
- Among the selected diagnoses, program payments per admission ranged from $1,598 for heart failure (ICD-9-CM code 428) to $3,127 for chronic ulcer of skin (ICD-9-CM code 707).
- Two of the selected principal diagnoses, fracture of neck of femur (ICD-9-CM code 820) and acute cerebrovascular disease (ICD-9-CM code 436) accounted for about 23 percent of all SNF admissions and program payments.

Table 46: Number of Medicare skilled nursing facility admissions and amount of total charges, by covered days of care and type of ancillary service: Calendar year 1988

- During 1988, an estimated 445.5 thousand Medicare beneficiaries incurred covered SNF charges amounting to $2.1 billion, or an average of $4,684 per admission.
- Of the covered SNF charges, approximately 63 percent ($1.3 billion) represented routine room and board accommodation charges (Figure 13).
- SNF ancillary charges amounted to $772 million, or 37 percent of all SNF covered charges.
- SNF pharmacy charges amounted to $203 million, or 10 percent of all SNF covered charges.
- Supply charges accounted for $134 million, or 6 percent of all SNF covered charges.
- The average SNF ancillary charge per admission, by type of service, ranged from $235 for radiology services to $1,075 for inhalation therapy charges.

Table 47: Medicare skilled nursing facility services, number of admissions, covered days of care, program payments, coinsurance amounts, and benefits exhausted status, by covered days of care: Calendar year 1988

- During 1988, 445,513 admissions to SNFs were recorded for Medicare HI beneficiaries.
- Of these admissions, 4,882 (1.0 percent) were categorized as having the SNF benefit exhausted (BEXH), indicating that these admissions exceeded the maximum number of CDOC during a benefit period.
- Almost 74 percent of all SNF admissions for Medicare HI beneficiaries involved stays of less than 31 days.
- BEXH admissions (4,882) accounted for $25 million (3 percent) of the total SNF program payments.
- The average SNF program payment for BEXH admissions was $5,082, or 2.4 times higher than the average payment ($2,132) for Medicare beneficiaries who did not exhaust their benefits.

Table 40
Trends in the use of Medicare short-stay hospital and skilled nursing facility services, and rates of change: Selected calendar years 1981-88

Type of facility	Calendar year							Percent change
	1981	1983	1984	1985	1986	1987	1988	1981-88
				Number of providers				
Short-stay hospital	6,067	6,048	6,029	6,034	5,912	5,850	5,733	-5.5
Skilled nursing facility	5,295	5,760	6,183	6,725	7,148	7,379	7,694	45.3
				Number in thousands				
Short-stay hospital discharges	10,660	11,436	10,896	10,335	10,044	10,110	10,256	-3.8
Skilled nursing facility admissions	273	309	333	353	347	327	445	63.0
				Rate per 1,000 hospital insurance enrollees				
Short-stay hospital discharges	368	387	363	313	322	317	316	-14.1
Skilled nursing facility admissions	10	10	11	12	11	10	14	40.0
				Average covered days of care				
Short-stay hospital discharges	10.1	9.5	8.6	8.4	8.4	8.6	8.6	-15.8
Skilled nursing facility admissions	29.2	29.2	26.6	23.4	22.4	21.5	26.5	-9.2
				Percent				
Skilled nursing facility admissions as percent of short-stay hospital discharges	2.6	2.7	3.1	3.4	3.5	3.2	4.3	65.0

1/ Beginning in 1983, swing-bed hospitals were included in the count of providers furnishing skilled nursing facility services.
2/ Includes skilled nursing facility admissions with at least 1 day of covered care under Medicare.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Statistical Sytstem; data development by the Office of Research and Demonstrations.

Table 41

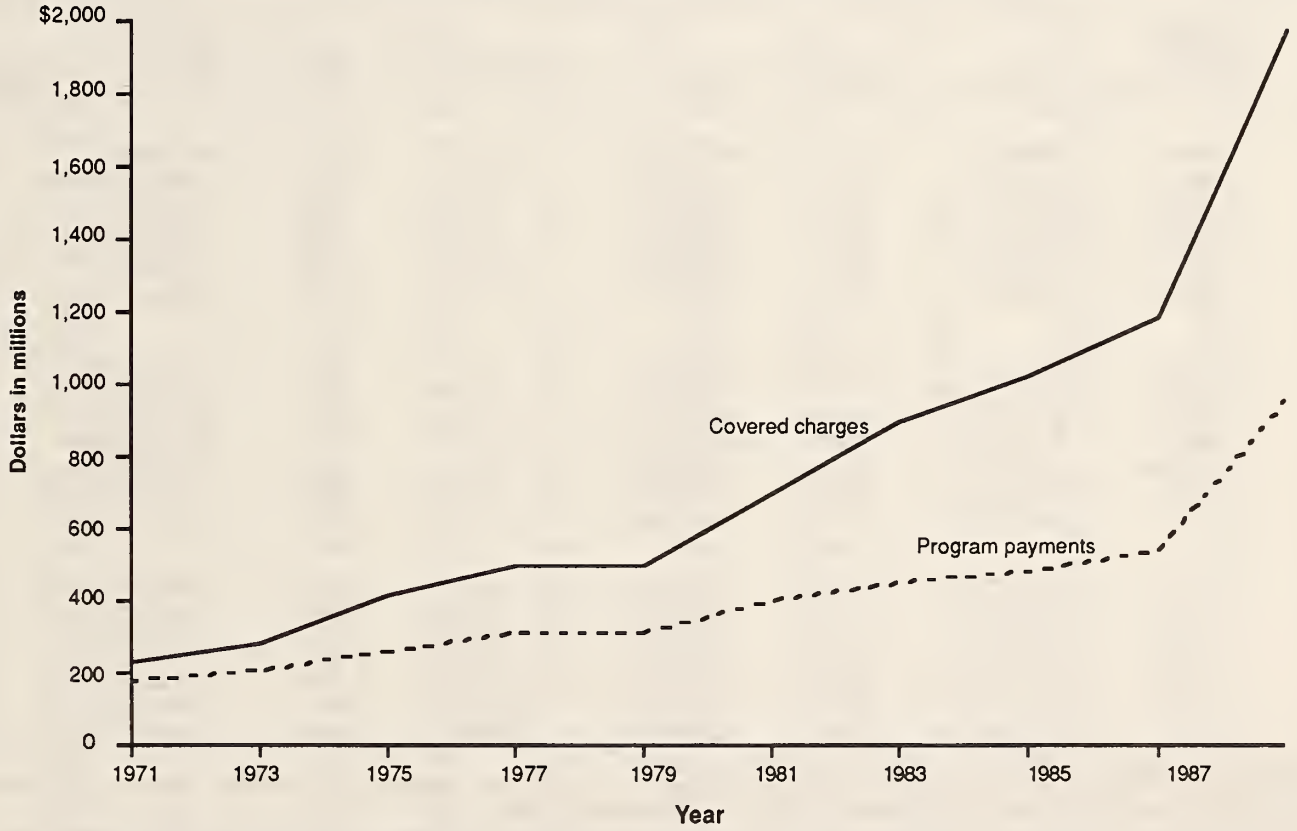
Trends in covered days of care, covered charges, and program payments for skilled nursing facility services used by Medicare hospital insurance beneficiaries, and total Medicare program payments, by type of entitlement: Selected calendar years 1971-88

Type of enrollment and selected calendar year	Covered days of care		Covered charges		Total Medicare program payments Part A and/or Part B in thousands	Skilled nursing facility program payments					
	Number in thousands	Per 1,000 enrollees	Amount in thousands	Per day		Amount in thousands	Percent of covered charges	Percent change	Percent of total Medicare program payments	Per enrollee	Per day
All beneficiaries											
1971	7,481	361	$229,912	$31	$7,486,953	$178,703	77.7	—	2.4	$9	$24
1973	8,629	370	282,091	33	9,639,206	212,761	75.4	28.7	2.2	9	25
1975	8,874	360	420,305	47	14,746,886	261,058	62.1	53.0	1.8	11	29
1977	9,612	368	497,553	52	21,094,334	312,703	62.8	43.0	1.5	12	33
1979	8,294	302	535,718	65	28,267,017	323,721	60.4	34.0	1.1	12	39
1981	8,575	300	697,306	81	41,021,962	402,984	57.8	45.1	1.0	14	47
1983	9,032	305	897,158	99	54,894,513	456,352	50.9	33.8	0.8	15	51
1984	8,864	296	975,362	110	56,761,299	464,796	47.7	3.4	0.8	16	52
1985	8,268	270	1,028,181	124	58,996,194	480,247	46.7	3.9	0.8	16	58
1986	7,770	249	1,122,723	144	68,582,511	501,171	44.6	16.2	0.7	16	65
1987	7,041	221	1,187,821	169	75,816,726	544,276	45.8	10.5	0.7	17	77
1988	11,802	364	1,981,593	168	80,595,454	964,069	48.7	6.3	1.2	30	82
Aged											
1971	7,481	361	229,912	31	7,486,953	178,703	77.7	—	2.4	9	24
1973	8,523	395	278,065	33	9,218,271	209,838	75.4	23.1	2.3	10	25
1975	8,585	382	405,547	47	13,178,458	251,506	62.0	43.0	1.9	11	29
1977	9,278	395	477,611	51	18,518,654	300,452	62.9	40.5	1.6	13	32
1979	7,988	325	513,397	64	24,491,108	310,488	60.4	32.3	1.3	13	39
1981	8,269	323	668,904	81	35,521,279	387,331	57.9	45.0	1.1	15	47
1983	8,738	328	864,565	99	47,949,283	440,705	51.0	35.0	0.9	17	50
1984	8,578	361	940,169	110	49,999,211	449,327	47.8	4.3	0.9	17	52
1985	7,986	288	987,745	124	52,148,364	463,062	46.9	4.3	0.9	17	58
1986	7,493	265	1,075,327	144	60,459,418	482,482	44.9	15.9	0.7	17	64
1987	6,875	235	1,136,461	165	67,893,397	523,548	46.1	12.3	0.8	18	77
1988	11,360	388	1,893,456	167	71,779,894	925,663	48.9	5.7	1.3	32	81
Disabled											
1975	289	133	14,758	51	1,568,428	9,552	64.7	—	0.6	4	33
1977	334	128	19,942	60	2,575,680	12,251	61.4	64.2	0.5	5	37
1979	306	105	22,321	73	3,775,909	13,233	59.2	46.6	0.4	5	43
1981	306	102	28,402	93	5,500,675	15,653	55.1	45.7	0.3	5	51
1983	293	101	32,594	111	6,945,230	15,647	48.0	26.3	0.2	5	53
1984	286	99	35,193	123	6,762,087	15,469	44.0	-2.6	0.2	5	54
1985	282	97	40,436	143	6,847,830	17,185	42.5	1.3	0.3	6	61
1986	277	93	47,396	171	8,123,093	18,689	39.4	18.6	0.2	6	68
1987	256	84	51,360	201	7,923,328	20,729	40.0	-2.5	0.2	7	81
1988	442	142	88,137	200	8,795,560	38,405	43.6	11.0	0.4	12	87

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Figure 12

Covered charges and program payments for Medicare beneficiaries admitted to skilled nursing facilities: Calendar years 1971-88



SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 42

Covered admissions, covered days of care, covered charges, and program payments for skilled nursing facility services used by Medicare hospital insurance beneficiaries, by type of entitlement and covered days of care: Calendar year 1988

Type of entitlement and covered days of care	Number of covered admissions 1/	Covered days of care		Covered charges			Program payments		
		Number	Per admission	Amount	Per admission	Per day	Amount	Per admission	Per day
All beneficiaries									
Total	445,513	11,802,212	26.5	$1,981,592,865	$4,448	$168	$964,068,657	$2,164	$82
1-8 days	119,151	589,561	4.9	123,184,045	1,034	209	68,856,196	578	117
9-20 days	150,139	2,103,050	14.0	409,492,734	2,727	195	242,059,359	1,612	115
21-40 days	93,567	2,657,165	28.4	488,721,477	5,223	184	242,923,136	2,596	91
41-60 days	33,942	1,672,164	49.3	276,979,984	8,160	166	114,573,044	3,376	69
61-80 days	17,307	1,203,313	69.5	185,086,917	10,694	154	70,062,778	4,048	58
81 days and over 2/	31,407	3,576,959	113.9	498,127,708	15,860	139	225,594,144	7,183	63
Aged									
Total	430,354	11,360,475	26.4	1,893,455,680	4,400	167	925,663,439	2,151	81
1-8 days	114,931	568,900	4.9	117,735,328	1,024	207	66,184,135	576	116
9-20 days	145,383	2,036,352	14.0	393,367,916	2,706	193	233,812,285	1,608	115
21-40 days	90,595	2,572,317	28.4	469,905,505	5,187	183	234,534,089	2,589	91
41-60 days	32,789	1,614,989	49.3	264,909,889	8,079	164	110,064,513	3,357	68
61-80 days	16,666	1,158,798	69.5	177,032,143	10,622	153	67,078,002	4,025	58
81 days and over 2/	29,986	3,409,119	113.7	470,504,899	15,691	138	213,990,415	7,136	63
Disabled									
Total	15,159	441,737	29.1	88,137,185	5,814	200	38,405,218	2,533	87
1-8 days	4,220	20,661	4.9	5,448,717	1,291	264	2,672,061	633	129
9-20 days	4,756	66,698	14.0	16,124,818	3,390	242	8,247,074	1,734	124
21-40 days	2,972	84,848	28.5	18,815,972	6,331	222	8,389,047	2,823	99
41-60 days	1,153	57,175	49.6	12,070,095	10,468	211	4,508,531	3,910	79
61-80 days	641	44,515	69.4	8,054,774	12,566	181	2,984,776	4,656	67
81 days and over 2/	1,417	167,840	118.4	27,622,809	19,494	165	11,603,729	8,189	69

1/ Includes skilled nursing facility (SNF) admissions with at least one day of covered care under Medicare.
2/ SNF provisions of the repealed Medicare Catastrophic Coverage Act of 1988 (in direct reference to 1988 SNF utilization) involved a "carryover" provision that enabled Medicare beneficiaries residing in an SNF at the end of 1988 to automatically qualify for another 150 days of care during the same benefit period that carried over into 1989.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 43

Covered admissions, covered days of care, covered charges, and program payments for skilled nursing facility services used by Medicare hospital insurance beneficiaries, by area of residence: Calendar year 1988

Area of residence	Covered admissions 1/		Covered days of care			Covered charges			Program payments			
	Number	Per 1,000 enrollees	Total in thousands	Per 1,000 enrollees	Per admission	Amount in thousands	Per admission	Per day	Amount in thousands	Percent of covered charges	Per admission	Per day
All areas	445,513	14	11,802	364	26.5	$1,981,593	$4,448	$168	$964,069	48.7	$2,164	$82
United States	444,643	15	11,789	399	26.5	1,979,559	4,452	168	963,079	48.7	2,166	82
Northeast	78,309	11	2,936	409	37.5	430,520	5,498	147	201,558	46.8	2,574	69
North Central	146,189	18	3,643	449	24.9	572,094	3,913	157	291,561	51.0	1,994	80
South	110,115	10	2,900	269	26.3	490,587	4,455	169	219,319	44.7	1,992	76
West	110,030	19	2,309	408	21.0	486,358	4,420	211	250,641	51.5	2,278	109
New England	15,922	9	546	300	34.3	79,759	5,009	146	35,560	44.6	2,233	65
Connecticut	7,480	17	262	579	35.0	33,608	4,493	129	14,019	41.7	1,874	54
Maine	1,089	6	35	202	32.5	8,286	7,609	234	4,977	60.1	4,570	140
Massachusetts	3,929	5	140	167	35.7	23,605	6,008	168	10,253	43.4	2,610	73
New Hampshire	1,053	8	25	190	23.6	4,462	4,238	179	1,810	40.6	1,719	73
Rhode Island	1,746	11	63	408	35.8	6,985	4,000	112	3,329	47.7	1,907	53
Vermont	625	9	21	298	34.2	2,813	4,501	132	1,172	41.7	1,875	55
Middle Atlantic	62,387	12	2,390	447	38.3	350,762	5,622	147	165,998	47.3	2,661	69
New Jersey	6,234	6	214	204	34.4	29,925	4,800	140	15,024	50.2	2,410	70
New York	29,001	12	1,309	542	45.1	188,913	6,514	144	84,586	44.8	2,917	65
Pennsylvania	27,152	14	866	460	31.9	131,924	4,859	152	66,388	50.3	2,445	77
East North Central	83,598	15	2,298	414	27.5	334,687	4,004	146	164,620	49.2	1,969	72
Illinois	23,269	16	565	382	24.3	113,499	4,878	201	54,381	47.9	2,337	96
Indiana	12,700	17	327	446	25.7	45,666	3,596	140	26,635	58.3	2,097	82
Michigan	19,078	16	600	509	31.4	66,195	3,470	110	28,136	42.5	1,475	47
Ohio	18,216	12	532	362	29.2	71,564	3,929	134	33,685	47.1	1,849	63
Wisconsin	10,335	15	275	398	26.6	37,763	3,654	137	21,783	57.7	2,108	79
West North Central	62,591	24	1,346	526	21.5	237,406	3,793	176	126,942	53.5	2,028	94
Iowa	10,927	24	169	379	15.5	40,469	3,704	239	24,167	59.7	2,212	143
Kansas	9,508	27	150	424	15.7	31,323	3,294	209	15,041	48.0	1,582	100
Minnesota	17,645	31	552	971	31.3	58,458	3,313	106	30,220	51.7	1,713	55
Missouri	14,893	20	279	370	18.7	77,179	5,182	276	41,903	54.3	2,814	150
Nebraska	5,048	22	101	433	19.9	18,271	3,619	182	10,065	55.1	1,994	100
North Dakota	3,078	32	71	739	23.0	8,045	2,614	114	3,937	48.9	1,279	56
South Dakota	1,492	14	24	224	16.0	3,662	2,454	153	1,608	43.9	1,078	67
South Atlantic	47,863	8	1,449	254	30.3	215,384	4,500	149	101,035	46.9	2,111	70
Delaware	708	9	28	335	39.3	2,771	3,914	100	1,480	53.4	2,090	53
District of Columbia	582	8	20	272	34.3	3,116	5,353	156	1,479	47.5	2,541	74
Florida	22,121	10	599	278	27.1	101,161	4,573	169	46,324	45.8	2,094	77
Georgia	4,455	7	122	178	27.3	16,211	3,639	133	7,692	47.4	1,726	63
Maryland	4,453	9	144	285	32.4	18,659	4,190	129	10,642	57.0	2,390	74
North Carolina	5,512	7	198	238	35.8	23,420	4,249	119	10,715	45.8	1,944	54
South Carolina	3,173	8	103	252	32.5	16,609	5,234	161	6,464	38.9	2,037	63
Virginia	4,421	7	164	244	37.2	23,936	5,414	146	12,147	50.7	2,748	74
West Virginia	2,438	8	71	241	29.2	9,503	3,898	134	4,092	43.1	1,678	58

See footnote at end of table.

Table 43—Continued

Covered admissions, covered days of care, covered charges, and program payments for skilled nursing facility services used by Medicare hospital insurance beneficiaries, by area of residence: Calendar year 1988

Area of residence	Covered admissions 1/		Covered days of care			Covered charges			Program payments			
	Number	Per 1,000 enrollees	Total in thousands	Per 1,000 enrollees	Per admission	Amount in thousands	Per admission	Per day	Amount in thousands	Percent of covered charges	Per admission	Per day
East South Central	27,248	13	774	376	28.4	$104,923	$3,851	$136	$46,135	44.0	$1,693	$60
Alabama	7,783	14	177	322	22.8	21,460	2,757	121	10,244	47.7	1,316	58
Kentucky	6,224	12	188	371	30.2	24,451	3,929	130	10,539	43.1	1,693	56
Mississippi	3,549	10	66	189	18.5	11,817	3,330	180	4,218	35.7	1,189	64
Tennessee	9,692	15	343	525	35.4	47,195	4,869	138	21,135	44.8	2,181	62
West South Central	35,004	12	677	226	19.3	170,279	4,865	252	72,148	42.4	2,061	107
Arkansas	3,596	10	54	144	15.0	12,627	3,511	234	7,940	62.9	2,208	147
Louisiana	7,787	16	126	252	16.1	50,708	6,512	404	19,143	37.8	2,458	152
Oklahoma	4,622	11	65	152	14.1	21,542	4,661	330	11,355	52.7	2,457	174
Texas	18,999	11	432	255	22.7	85,403	4,495	198	33,711	39.5	1,774	78
Mountain	25,556	17	498	332	19.5	94,808	3,710	190	49,750	52.5	1,947	100
Arizona	6,713	15	143	313	21.3	26,758	3,986	187	14,738	55.1	2,195	103
Colorado	6,161	19	104	317	17.0	24,484	3,974	234	11,767	48.1	1,910	113
Idaho	2,247	18	40	318	17.8	5,271	2,346	132	2,816	53.4	1,253	71
Montana	3,012	27	63	565	21.0	7,377	2,449	117	3,825	51.8	1,270	60
Nevada	1,070	9	29	244	27.3	4,842	4,526	166	2,645	54.6	2,472	90
New Mexico	1,541	9	33	204	21.7	8,059	5,230	241	4,602	57.1	2,986	138
Utah	4,260	29	75	508	17.6	16,403	3,850	219	8,686	53.0	2,039	116
Wyoming	552	11	10	206	18.1	1,613	2,922	161	670	41.5	1,213	67
Pacific	84,474	20	1,811	435	21.4	391,550	4,635	216	200,891	51.3	2,378	111
Alaska	168	8	5	219	27.9	1,252	7,450	267	587	46.9	3,493	125
California	71,549	23	1,490	489	20.8	338,213	4,727	227	172,169	50.9	2,406	116
Hawaii	797	7	36	314	44.9	6,422	8,058	179	2,699	42.0	3,387	75
Oregon	4,918	12	120	300	24.4	20,210	4,109	168	11,101	54.9	2,257	93
Washington	7,042	12	161	278	22.8	25,453	3,614	158	14,334	56.3	2,036	89

1/ Includes skilled nursing facility admissions with at least 1 day of covered care under Medicare.

SOURCE: Health Care Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 44

Covered admissions, covered days of care, covered charges, and program payments for skilled nursing facility services used by Medicare hospital insurance beneficiaries, by age, sex, and race: Calendar year 1988

Age, sex, and race	Covered admissions 1/		Covered days of care			Covered charges			Program payments			
	Number	Per 1,000 enrollees	Total in thousands	Per 1,000 enrollees	Per admission	Amount in thousands	Per admission	Per day	Amount in thousands	Percent of covered charges	Per admission	Per day
Total	445,513	14	11,802	364	26.5	$1,981,593	$4,448	$168	$964,069	48.7	$2,164	$82
Age												
Under 65 years	15,148	5	442	142	29.1	88,090	5,815	200	38,388	43.6	2,534	87
65-66 years	11,930	3	298	77	25.0	60,151	5,042	202	26,790	44.5	2,246	90
67-68 years	14,911	4	381	101	25.5	74,984	5,029	197	33,794	45.1	2,266	89
69-70 years	18,055	5	459	138	25.4	89,467	4,955	195	40,312	45.1	2,233	88
71-72 years	22,406	7	569	185	25.4	105,377	4,703	185	49,399	46.9	2,205	87
73-74 years	27,985	10	716	250	25.6	130,227	4,653	182	61,139	46.9	2,185	85
75-79 years	87,790	16	2,287	405	26.1	395,642	4,507	173	190,530	48.2	2,170	83
80-84 years	101,769	28	2,702	739	26.6	438,284	4,307	162	218,228	49.8	2,144	81
85 years and over	145,519	47	3,948	1,279	27.1	599,369	4,119	152	305,488	51.0	2,099	77
Sex												
Male	145,546	11	3,583	260	24.6	641,264	4,406	179	299,828	46.8	2,060	84
Female	299,967	16	8,219	441	27.4	1,340,329	4,468	163	664,241	49.6	2,214	81
Race												
White	400,704	14	10,473	372	26.1	1,739,563	4,341	166	852,847	49.0	2,128	81
Other	32,927	10	1,017	307	30.9	187,974	5,709	185	84,705	45.1	2,573	83
Unknown	11,882	12	312	327	26.3	54,055	4,549	173	26,517	49.1	2,232	85

1/ Includes skilled nursing facility admissions with at least 1 day of covered care under Medicare.

SOURCE: Health Care Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 45

Number of covered admissions, covered days of care, covered charges, and program payments for skilled nursing facility services used by Medicare hospital insurance beneficiaries, by 12 selected principal admitting diagnoses: Calendar year 1988

Principal admitting diagnosis	ICD-9-CM code 1/	Number of covered admissions 2/	Covered days of care		Covered charges			Program payments			
			Total in thousands	Per admission	Amount in thousands	Per admission	Per day	Amount in thousands	Percent of covered charges	Per admission	Per day
All diagnoses	—	445,513	11,802	26.5	$1,981,593	$4,448	$168	$964,069	48.7	$2,164	$82
12 selected diagnoses 3/											
Total	—	185,238	5,253	28.4	840,999	4,540	160	407,051	48.4	2,197	77
Malignant neoplasm of trachea, bronchus, and lung	162	4,742	85	17.8	16,569	3,494	196	8,003	48.3	1,688	95
Diabetes mellitus	250	11,270	461	40.9	58,550	5,195	127	31,052	53.0	2,755	67
Chronic ischemic heart disease	414	4,045	112	27.8	15,079	3,728	134	7,424	49.2	1,835	66
Heart failure	428	14,249	293	20.6	44,551	3,127	152	22,763	51.1	1,598	78
Acute cerebrovascular disease	436	43,364	1,407	32.4	232,330	5,358	165	104,324	44.9	2,406	74
Pneumonia, organism unspecified	486	15,257	333	21.8	53,147	3,483	159	25,744	48.4	1,687	77
Chronic airway obstruction	496	6,315	135	21.3	23,613	3,739	175	10,568	44.8	1,674	78
Disorders of urethra and urinary tract	599	9,330	244	26.1	35,305	3,784	145	17,961	50.9	1,925	74
Chronic ulcer of skin	707	12,712	508	40.0	95,891	7,543	189	39,749	41.5	3,127	78
Fracture of neck of femur	820	53,147	1,395	26.2	217,120	4,085	156	114,523	52.7	2,155	82
Fracture of unspecified parts of femur	821	5,933	176	29.6	27,360	4,612	156	13,707	50.1	2,310	78
Other orthopedic aftercare	V54	4,874	104	21.3	21,484	4,408	207	11,233	52.3	2,305	108
All other diagnoses											
Total	—	260,275	6,549	25.2	1,140,594	4,382	174	557,018	48.8	2,140	85

1/ Denotes diagnostic codes derived from the *International Classification of Diseases, 9th Revision, Clinical Modification (Volume 1).*
2/ Includes skilled nursing facility admissions with at least one day of covered care under Medicare.
3/ Based on frequency of occurrence in calendar year 1985.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 46

Type of ancillary service and amount of total charges for Medicare skilled nursing facility admissions, by covered days of care: Calendar year 1988

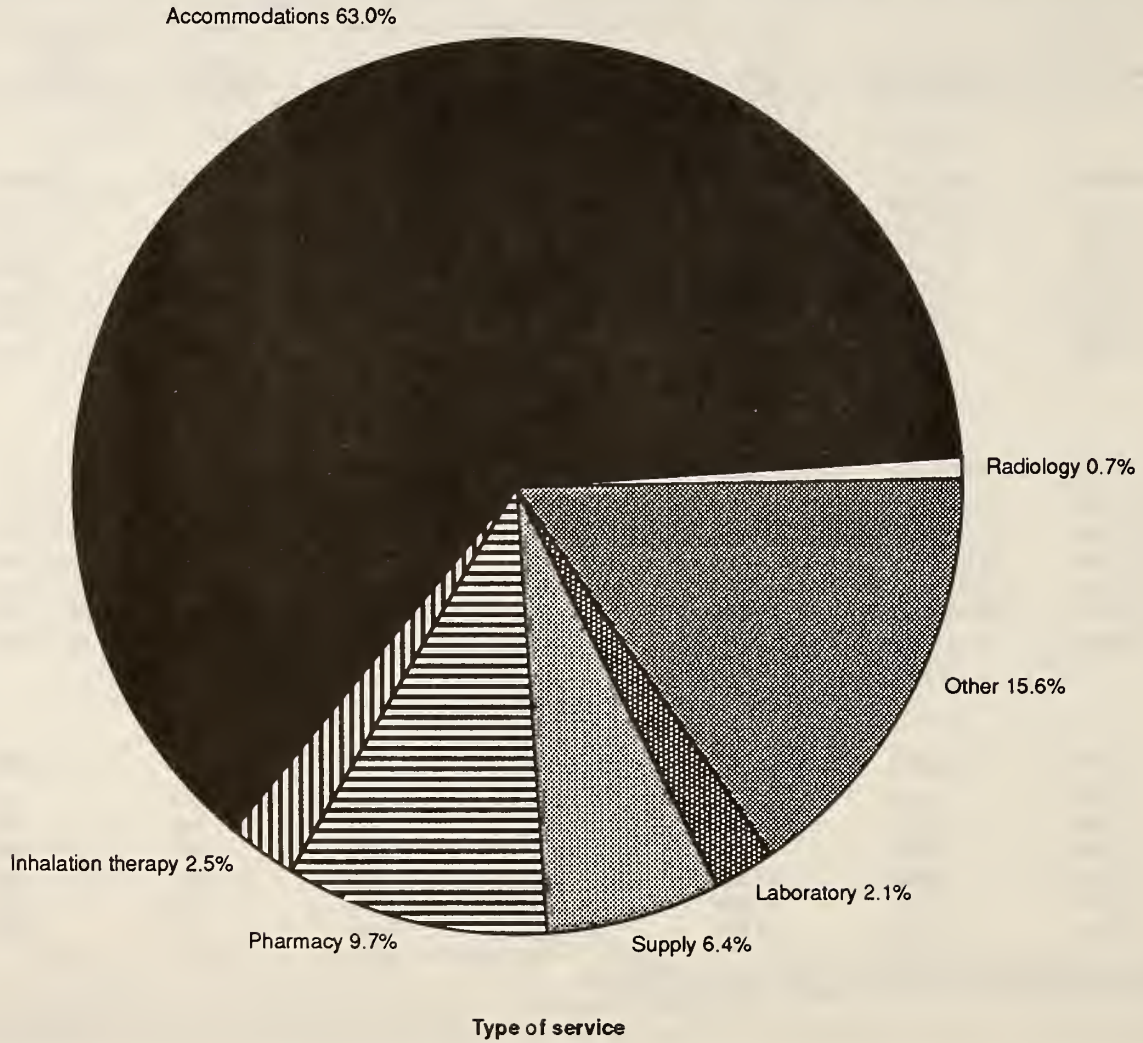
Covered days of care	All services	Accommodations	Type of ancillary service						
			Total	Pharmacy	Laboratory	Radiology	Supply	Inhalation therapy	Other 1/
			Number of admissions 2/						
Total	445,505	445,499	410,638	371,986	134,786	62,834	300,331	47,585	275,871
1 to 8 days	119,146	119,141	106,495	93,854	33,137	12,439	73,441	14,935	57,666
9 to 20 days	150,137	150,137	141,587	127,754	51,790	23,883	104,185	16,677	101,074
21 to 30 days	61,033	61,033	57,792	52,838	20,042	10,496	43,226	5,939	43,775
31 to 40 days	32,534	32,534	30,422	28,039	9,663	5,200	22,892	3,050	22,507
41 to 100 days	73,773	73,772	66,839	62,249	18,245	9,729	50,600	6,268	46,152
101 days and more	8,882	8,882	7,503	7,252	1,909	1,087	5,987	716	4,697
			Amount of total charges						
Total	$2,086,570,750	$1,313,851,650	$772,344,320	$202,764,432	$44,779,280	$14,756,713	$133,504,704	$51,135,024	$326,321,920
1 to 8 days	134,628,542	73,158,138	61,510,104	22,903,317	5,697,915	1,835,275	8,941,651	5,815,948	16,367,984
9 to 20 days	430,113,680	242,320,032	187,885,622	53,799,904	14,032,913	4,737,781	24,955,196	13,856,437	76,612,373
21 to 30 days	296,987,136	170,649,584	126,466,304	32,305,712	7,772,986	2,807,295	17,267,904	7,450,593	58,898,016
31 to 40 days	210,217,216	125,816,880	84,175,184	21,542,336	4,695,899	1,633,067	12,495,178	4,814,479	39,056,976
41 to 100 days	786,851,072	525,366,016	261,643,312	60,599,728	10,872,243	3,334,733	55,714,624	15,611,345	115,615,344
101 days and more	227,773,984	176,541,840	50,664,432	11,613,565	1,707,390	408,562	14,130,218	3,586,259	19,771,504
			Average total charges per admission						
Total	$4,684	$2,949	$1,881	$545	$332	$235	$445	$1,075	$1,183
1 to 8 days	1,130	614	578	244	172	148	122	389	284
9 to 20 days	2,865	1,614	1,327	421	271	198	240	831	758
21 to 30 days	4,866	2,796	2,188	611	388	267	399	1,255	1,345
31 to 40 days	6,461	3,867	2,767	768	486	314	546	1,579	1,735
41 to 100 days	10,666	7,121	3,915	974	596	343	1,101	2,491	2,505
101 days and more	25,644	19,876	6,753	1,601	894	376	2,360	5,009	4,209

1/ Includes services such as physical therapy, occupational therapy, blood and blood components, etc.
2/ Includes skilled nursing facility admissions with at least one day of covered care under Medicare.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Figure 13

Percent distribution of Medicare skilled nursing facility total charges, by type of service: Calendar year 1988



NOTE: Total charges are equal to $2.1 billion.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 47

Medicare skilled nursing facility services, number of admissions, covered days of care, program payments, and benefits exhausted status, by covered days of care: Calendar year 1988

Covered days of care	Number of admissions			Covered days of care			Program payments			Average program payments		
	Total	Benefits exhausted	Benefits not exhausted	Total	Benefits exhausted	Benefits not exhausted	Total	Benefits exhausted	Benefits not exhausted	Total	Benefits exhausted	Benefits not exhausted
Total	445,513	4,882	440,631	11,802,212	439,942	11,362,270	$964,068,657	$24,811,976	$939,256,681	$2,164	$5,082	$2,132
1-8 days	119,151	196	118,955	589,561	891	588,670	68,856,196	33,935	68,822,261	578	173	579
9-20 days	150,139	237	149,902	2,103,050	3,507	2,099,543	242,059,359	166,561	241,892,798	1,612	703	1,614
21-30 days	61,033	171	60,862	1,519,957	4,436	1,515,521	150,625,411	189,642	150,435,769	2,468	1,109	2,472
31-40 days	32,534	156	32,378	1,137,208	5,525	1,131,683	92,297,725	219,958	92,077,767	2,837	1,410	2,844
41-50 days	20,212	158	20,054	912,147	7,193	904,954	64,980,290	285,709	64,694,581	3,215	1,808	3,226
51-60 days	13,730	162	13,568	760,017	8,996	751,021	49,592,754	389,560	49,203,194	3,612	2,405	3,626
61-70 days	10,040	232	9,808	656,041	15,588	640,453	38,985,979	774,030	38,211,949	3,883	3,336	3,896
71-80 days	7,267	209	7,058	547,272	15,867	531,405	31,076,799	737,294	30,339,505	4,276	3,528	4,299
81-90 days	5,664	191	5,473	483,670	16,370	467,300	27,030,845	757,271	26,273,574	4,772	3,965	4,801
91-100 days	16,861	2,604	14,257	1,663,404	259,607	1,403,797	78,972,231	12,815,755	66,156,476	4,684	4,922	4,640
101 days or more	8,882	566	8,316	1,429,885	101,962	1,327,923	119,591,068	8,442,261	111,148,807	13,464	14,916	13,366

NOTE: Before January 1,1987, beneficiaries who were residents of skilled nursing facilities for more than 100 days in a benefit period exhausted their benefits.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

VII. Summary of the hospital insurance benefit for home health agency services

The Medicare hospital insurance (HI) program covers home health agency (HHA) services for beneficiaries who are confined to the home and who need intermittent skilled nursing care, physical therapy, or speech therapy. The use and cost of HHA services rendered to beneficiaries for the period 1974-88 are measured by the number of persons served, number of visits, and amounts of visit charges and program payments.

In 1966, Congress established the Medicare HHA benefit to provide a less expensive alternative to short-stay hospital or SNF care. The HHA benefit covers services that include intermittent, part-time skilled nursing care; physical, occupational, or speech therapy; part-time home health aide services; medical social services; medical supplies; and durable medical equipment.

To be eligible for the HHA benefit:

- The Medicare enrollee must be confined to the home and must have a plan of treatment developed by the attending physician.
- The plan of treatment must include intermittent, part-time skilled nursing care, and physical or speech therapy.
- The HHA services must be provided by an agency certified to participate in the Medicare program.

Although Medicare payments for HHA services represent only a small proportion (2.4 percent) of all program payments, the data show a rapid rate of growth in HHA payments during the period 1974-83, contrasted with a slower growth rate during the 1983-88 period. The rates of growth in the HHA industry have been influenced by four significant pieces of legislation.

The first, the "Social Security Amendments of 1972 (Public Law 92-603) eliminated the 20-percent coinsurance for HHA services furnished under Medicare. The first major increase in program payments for HHA services followed the passage of this provision. From 1972 through 1973, program payments increased from $66.2 to $95.3 million. If the rise in program payments were shown for the period from 1972 through 1983, the AARC would be 32 percent" (Silverman, *Health Care Financing Review.* Winter 1990. Vol. 12, No. 2).

The second piece of legislation, implemented on July 1, 1981, was the Omnibus Reconciliation Act (ORA) of 1980 (Public Law 96-499). ORA encouraged the use of the HHA benefit by (1) removing the limit on the number of HHA visits, (2) eliminating the 3-day prior hospital stay under Part A, (3) eliminating the deductible for HHA services under Part B, and (4) permitting proprietary HHAs to operate in States not having licensure laws.

The removal of these restrictions under ORA 1980 generated substantial changes in the types of HHAs serving Medicare enrollees and contributed to faster growth among the proprietary HHAs.

- A comparison of the number of HHA visits in 1980 (unpublished) with those in 1988 indicates that proprietary agencies had the fastest rate of growth.
- Visits by health care personnel from proprietary HHAs increased nearly 8 times, from 1.6 million in 1980 to 12.6 million in 1988.
- By 1988, the staffs of proprietary HHAs were visiting more Medicare beneficiaries than were the staffs of any other type of HHA.
- Of the hospital-based HHAs, the number of persons receiving Medicare services rose from 190,000 in 1983 to 412,000 in 1988, an increase of 117 percent.
- Similarly, the number of visits by hospital-based HHA personnel rose from 4.4 million visits in 1983 to 8.4 million in 1988, an increase of 91 percent.

The possibility for broader expansion of the HHA industry could be seen in the third legislative initiative, the Social Security Amendments of 1983 (Public Law 98-21), effective October 1, 1983. This landmark legislation provided for a prospective payment system (PPS) to replace the former retrospective system used for reimbursing short-stay hospitals for the care received by Medicare beneficiaries. Under PPS, the financial interest of the hospital is best served by discharging patients as soon as medically indicated or by directing them to alternative providers of services, such as SNFs or HHAs. Thus, it might be expected that one effect of PPS could be increases in the rates of growth in HHA services and program payments. According to the data shown in this report, the anticipated expansion has not occurred. For example:

- During the study period 1974-88, Medicare program payments for HHA benefits increased from $141 million to $2.0 billion, an average annual rate of change (AARC) of 21 percent.
- In the years prior to PPS (1974-83), the AARC for HHA expenditures was 29 percent.

- Following the implementation of PPS (the period 1983-88), however, the AARC for HHA expenditures was lowered to 7 percent.

The lower rate of growth in the period following the introduction of PPS may reflect a variety of possible causes, including:

- The sharp decline in the discharge rate from short-stay hospitals in the PPS period.
- The return to a normal rate of growth in the HHA industry following the 1980-83 acceleration in growth caused by ORA of 1980.

The fourth legislative initiative, the Deficit Reduction Act (DEFRA) of 1984, mandated that there be no more than 10 regional intermediaries to process HHA claims. The HHA provisions of DEFRA were designed to increase intermediary expertise in the provision of HHA benefits, to provide greater consistency in the review of HHA claims, and to expand intermediary awareness of instances of fraud and abuse.

- DEFRA 84 resulted in an increased rate of denials of coverage and payments for HHA claims—denials that are reflected in the consistent decline in the number of covered visits from 1984 through 1987.

Table 48: Trends in the use and cost of Medicare home health agency services, by year of service: Selected calendar years 1974-88

- In 1974, 16 of every 1,000 hospital insurance enrollees received HHA services. In 1988, 49 of every 1,000 enrollees were receiving HHA services.
- The number of persons served using HHA benefits increased from 957,400 in 1980 to 1.4 million in 1983, an AARC of 12.2 percent.
- By 1988, the number of persons receiving HHA services increased to 1.6 million, an AARC of 3.5 percent for the 1983-88 period.
- Similarly, persons served per 1,000 enrollees increased from 34 in 1980 to 45 in 1983, an AARC of 9.8 percent. During the 1983-88 period, the AARC was 1.7 percent.
- HHA visits rose at an AARC of 18.0 percent in the 1980-83 period compared with an increase of 0.5 percent in the 1983-88 period.
- The AARC increased in the pre-PPS period for both visits per person served (5.5 percent) and visits per 1,000 enrollees (15.9 percent) but fell during the PPS period (-2.3 percent and -1.4 percent, respectively).

Table 49: Medicare home health agency services, persons served, visits, total charges, visit charges, and program payments, by area of residence: Calendar year 1988

- The greatest use of HHA services was in the Northeast and South Regions. The South Region had the highest number of persons served per 1,000 enrollees (53) and the highest number of visits per 1,000 enrollees (1,569).
- Similarly, the Northeast Region recorded the second highest number of persons served per 1,000 enrollees (51) and the second highest number of visits per 1,000 enrollees (1,041).
- The Northeast and South Regions together accounted for 60 percent (957,000) of all persons served (1.6 million) and 66 percent (24.8 million) of all HHA visits (37.7 million).
- The South Region had the highest visit charges per person served ($1,765), about 21 percent higher than the national average ($1,462). This increase was the result of a substantially high number of visits per person served (29.6) and a visit charge per visit ($60) that was just below the national average ($62).
- On the other hand, the North Central Region had the lowest visit charges per person ($1,227), about 16 percent below the national average. This decrease reflected a very low number of visits per person served (20.3) and a visit charge per visit ($61) that was just below the national average.

Table 50: Medicare home health agency services, persons served, visits, total charges, visit charges, and program payments, by demographic characteristics: Calendar year 1988

- The rate of persons served per 1,000 enrollees rose from 30.1 for persons under 65 years of age to 70.1 for those 80-84 years of age, an increase of 133 percent.
- The highest visit charge per enrollee ($103) and program payment per enrollee ($86) was for the cohort 80-84 years of age.
- For persons served per 1,000 enrollees, the proportion of females using HHA services (54) was 29 percent higher than the proportion of males (42).
- Females had one-third more visits per 1,000 enrollees (1,281) than did males (956).
- Visits per person served were nearly the same for both males and females.
- The proportion of aged persons using HHA services per 1,000 enrollees (52) was about 73 percent higher than for the disabled (30).
- In contrast, the disabled had a 12 percent higher average number of visits per person served than did aged persons (26 versus 23).

Table 51: Medicare home health agency services, persons served, visits, total charges, and program payments, by type of agency and number of visits: Calendar year 1988

- For persons receiving covered HHA services in 1988, an estimated one-third (12.6 million) of all HHA visits (37.7 million) were rendered by proprietary HHAs.
- Proprietary agencies accounted for nearly one-third ($626.0 million) of all HHA program payments ($1.9 billion).
- Hospital-based HHAs and visiting nurse associations (VNA) accounted for 24 percent (8.4 million) and 20 percent (7.7 million), respectively, of all HHA visits.
- Similarly, hospital-based HHAs accounted for 22 percent ($468.3 million) and 21 percent ($408.8 million), respectively, of all Medicare HHA program payments.
- Over two-fifths (665 thousand) of all persons receiving covered HHA services had less than 10 visits per year; approximately two-thirds (1.1 million) had less than 20 visits per year.
- Conversely, only about 11 percent (182,000) of all persons served had 50 or more HHA visits during the year.
- By type of HHA, proprietary HHAs had the highest proportion (16 percent) of persons with 50 or more visits.

Table 52: Types of Medicare home health agencies, persons served, visits, and charges, by type of visit: Calendar year 1988

- Among the persons receiving HHA services (1.6 million), about 91 percent (1.4 million) received nursing care services and 38 percent (609,000) received home health aide services.
- Of all HHA visits (37.7 million), the nursing care visits (19.3 million) accounted for over one-half, and the home health aide visits (12.7 million) accounted for approximately one-third (Figure 14).
- The average visit charge per person served was $1,876 for proprietary agencies, about 28 percent higher than the average charge for all HHAs ($1,462).
- Proprietary agencies had, by far, the highest number of visits per person served (29.6 visits) and an average visit charge per visit ($63) comparable to that for all HHAs ($62).
- Government agencies had the second lowest average visit charge per person served ($1,065), reflecting a low number of visits per person served (21.4 visits) and the lowest visit charge per visit ($50).
- Combined government and voluntary agencies had the lowest average visit charge per person served ($961), but they served only one-percent (11.0 thousand) of all HHA beneficiaries.
- By type of visit, the average number of visits per person served ranged from 9.3 visits for physical therapy to 20.9 visits for home health aide services.
- Similarly, the average visit charge per visit ranged from $49 for home health aide services to $69 for physical therapy (Figure 15).

Table 48

Trends in the use and cost of Medicare home health agency services, by year of service: Selected calendar years 1974-88

Year of service	Persons served		Visits			Total charges	Visit charges				Program payments		
	Number in thousands	Per 1,000 enrollees	Number in thousands	Per person served	Per 1,000 enrollees	Amount in thousands	Amount in thousands	Per visit	Per person served	Per enrollee	Amount in thousands	Per person served	Per enrollee
1974 1/	392.7	16	8,070	21	340	$147,499	$137,406	$17	$350	$6	$141,484	$360	$6
1976	588.7	23	13,335	23	520	312,325	292,697	22	497	11	289,851	492	11
1978	769.7	28	17,345	23	639	500,747	474,498	27	617	18	435,322	566	16
1980 2/	957.4	34	22,428	23	788	770,703	734,718	33	767	26	662,133	692	23
1982	1,171.9	40	30,787	26	1,044	1,296,454	1,232,684	40	1,052	42	1,104,715	943	37
1983 3/	1,351.2	45	36,844	27	1,227	1,657,024	1,596,989	43	1,182	53	1,398,092	1,035	47
1984 4/	1,515.9	50	40,337	27	1,324	1,982,033	1,843,706	46	1,216	61	1,666,253	1,099	55
1985	1,588.6	51	39,742	25	1,279	2,124,312	2,040,887	51	1,285	66	1,773,048	1,116	57
1986	1,600.2	50	38,359	24	1,208	2,190,238	2,102,253	55	1,314	66	1,795,820	1,122	57
1987	1,564.5	48	36,088	23	1,113	2,210,670	2,104,753	58	1,345	65	1,791,589	1,145	55
1988	1,601.7	49	37,713	24	1,144	2,453,974	2,341,441	62	1,462	71	1,945,768	1,215	59
						Average annual rate of change							
1974-83	14.7	12.2	18.4	2.8	15.3	30.8	31.3	10.9	14.5	27.4	29.0	12.5	25.7
1974-88	10.6	8.3	11.6	1.0	9.1	22.2	22.5	9.7	10.8	19.3	20.6	9.1	17.7
1980-83	12.2	9.8	18.0	5.5	15.9	29.1	29.5	9.2	15.5	26.8	28.3	14.4	26.9
1983-88	3.5	1.7	0.5	-2.3	-1.4	8.2	8.0	7.6	4.3	6.0	6.8	3.3	4.7

1/ The 1974 data show the effects of the Social Security Amendments of 1972 (Public Law 92-603).
2/ The Omnibus Reconciliation Act of 1980 (Public Law 96-499) became effective on July 1, 1981.
3/ The The Social Security Amendments of 1983 (Public Law 98-21) became effective October 1, 1983.
4/ The Deficit Reduction Act of 1984 (Public Law 98-369) became effective in 1984.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 49

Medicare home health agency services, persons served, visits, total charges, visit charges, and program payments, by area of residence: Calendar year 1988

Area of residence	Persons served		Visits			Total charges	Visit charges				Program payments	
	Number in thousands	Per 1,000 enrollees	Number in thousands	Total per person served	Per 1,000 enrollees	in thousands	Amount in thousands	Per visit	Per person served	Per enrollee	Amount in thousands	Per enrollee
All areas	1,602	48.6	37,713	23.5	1,144	$2,453,974	$2,341,441	$62	$1,462	$71	$1,945,768	$59
United States	1,580	48.9	37,341	23.6	1,156	2,424,597	2,316,691	62	1,466	72	1,924,517	60
Northeast	374	51.2	7,595	20.3	1,041	488,532	477,164	63	1,278	65	403,668	55
North Central	354	43.2	7,177	20.3	877	446,950	434,403	61	1,227	53	366,133	45
South	583	53.1	17,250	29.6	1,569	1,095,818	1,029,661	60	1,765	94	823,093	75
West	270	46.5	5,319	19.7	917	393,297	375,463	71	1,392	65	331,624	57
New England	94	51.1	2,071	22.0	1,123	111,199	107,814	52	1,143	58	52,000	55
Connecticut	24	51.8	567	24.0	1,244	30,545	30,261	53	1,280	66	26,498	58
Maine	7	42.0	162	21.7	912	7,920	7,541	47	1,012	42	7,176	40
Massachusetts	44	51.6	899	20.5	1,057	48,705	47,424	53	1,081	56	44,882	53
New Hampshire	6	48.5	128	19.9	966	6,530	6,378	50	995	48	6,062	46
Rhode Island	7	46.7	170	23.5	1,097	11,473	10,333	61	1,423	66	10,928	70
Vermont	6	77.9	145	25.6	1,998	6,027	5,877	41	1,041	81	5,454	75
Middle Atlantic	279	51.2	5,524	18.8	1,014	377,333	369,350	67	1,323	68	922	56
New Jersey	49	45.8	848	17.4	795	53,557	52,643	62	1,078	49	46,276	43
New York	100	40.1	1,670	16.8	873	127,682	125,141	75	1,257	50	99,238	40
Pennsylvania	131	68.8	3,006	23.0	1,580	196,094	191,566	64	1,464	101	157,153	83
East North Central	253	45.1	5,068	20.0	903	321,520	312,608	62	1,235	56	13,198	47
Illinois	76	50.6	1,564	20.6	1,043	107,277	103,494	66	1,363	69	84,284	56
Indiana	26	35.0	530	20.6	720	29,844	28,483	54	1,105	39	26,203	36
Michigan	63	53.0	1,403	22.2	1,179	95,397	93,574	67	1,483	79	78,536	66
Ohio	62	41.3	1,089	17.7	730	64,735	63,378	58	1,030	42	53,786	36
Wisconsin	27	38.5	483	18.1	695	24,267	23,680	49	886	34	22,217	32
West North Central	101	39.2	2,108	20.9	819	125,430	121,795	58	1,207	47	18,581	39
Iowa	13	28.3	234	18.5	523	10,841	10,603	45	836	24	9,464	21
Kansas	11	30.4	242	22.5	682	14,463	14,029	58	1,300	39	10,844	31
Minnesota	11	19.3	177	16.0	309	10,031	9,759	55	884	17	8,647	15
Missouri	52	68.5	1,180	22.6	1,550	74,957	73,081	62	1,401	96	58,886	77
Nebraska	9	37.8	170	19.3	729	9,667	8,988	53	1,019	39	8,537	37
North Dakota	3	29.4	57	19.9	586	3,060	2,983	53	1,049	31	2,571	27
South Dakota	3	23.5	48	18.9	445	2,409	2,352	49	929	22	2,158	20
South Atlantic	296	50.8	7,980	27.0	1,370	505,828	477,543	60	1,613	82	213,697	68
Delaware	5	54.0	125	27.5	1,487	6,711	6,537	52	1,445	78	5,044	60
Dist. of Columbia	4	48.7	82	21.5	1,046	5,574	5,445	66	1,429	70	4,816	62
Florida	131	59.6	3,646	27.8	1,657	234,855	225,948	62	1,722	103	178,594	81
Georgia	33	46.9	1,149	35.0	1,644	78,989	73,234	64	2,233	105	58,972	84
Maryland	26	51.0	542	20.6	1,048	35,387	33,965	63	1,289	66	29,978	58
North Carolina	37	44.5	986	26.3	1,169	55,745	49,997	51	1,333	59	45,733	54
South Carolina	19	44.4	453	24.5	1,085	29,298	26,758	59	1,444	64	22,514	54
Virginia	29	42.9	721	24.5	1,051	43,143	40,863	57	1,387	60	36,962	54
West Virginia	12	39.8	276	23.1	919	16,127	14,796	54	1,240	49	13,003	43

See footnotes at end of table.

Table 49—Continued

Medicare home health agency services, persons served, visits, total charges, visit charges, and program payments, by area of residence: Calendar year 1988

Area of residence	Persons served		Visits			Total charges	Visit charges				Program payments	
	Number in thousands	Per 1,000 enrollees	Number in thousands	Total per person served	Per 1,000 enrollees	in thousands	Amount in thousands	Per visit	Per person served	Per enrollee	Amount in thousands	Per enrollee
East South Central	137	65.0	5,433	39.8	2,584	$328,496	$306,935	$56	$2,247	$146	$19,398	$115
Alabama	32	56.7	1,144	35.9	2,033	65,885	62,675	55	1,966	111	52,000	92
Kentucky	23	43.6	654	28.9	1,263	35,862	32,509	50	1,439	63	28,216	55
Mississippi	30	84.3	1,401	46.5	3,921	83,734	78,438	56	2,603	219	58,165	163
Tennessee	52	78.2	2,235	43.0	3,359	143,016	133,312	60	2,563	200	104,232	157
West South Central	151	49.2	3,837	25.5	1,253	261,494	245,183	64	1,628	80	26,498	60
Arkansas	15	40.4	421	27.4	1,106	27,416	26,231	62	1,707	69	18,581	49
Louisiana	31	60.6	919	29.6	1,790	60,322	55,356	60	1,781	108	43,725	85
Oklahoma	20	44.6	457	23.4	1,044	30,849	29,530	65	1,514	67	23,607	54
Texas	85	48.9	2,041	24.1	1,178	142,906	134,066	66	1,584	77	98,952	57
Mountain	55	35.9	1,271	23.3	836	81,256	77,762	61	1,424	51	5,044	45
Arizona	11	23.2	224	20.9	485	15,095	13,983	62	1,307	30	13,198	29
Colorado	14	42.1	328	23.3	981	22,542	22,067	67	1,567	66	19,398	58
Idaho	5	39.7	95	18.9	751	5,561	5,148	54	1,028	41	4,928	39
Montana	5	40.9	115	24.9	1,017	6,089	5,862	51	1,272	52	5,134	46
Nevada	5	39.3	119	25.1	987	8,297	7,983	67	1,680	66	6,668	55
New Mexico	6	38.7	118	18.2	706	7,370	6,953	59	1,072	42	5,966	36
Utah	8	51.1	246	32.3	1,650	14,724	14,253	58	1,871	96	11,036	74
Wyoming	1	27.7	26	19.6	542	1,579	1,513	58	1,133	31	1,425	30
Pacific	215	50.3	4,048	18.8	946	312,040	297,701	74	1,384	70	4,816	62
Alaska	1	23.7	12	22.5	534	769	756	65	1,460	35	922	42
California	171	54.3	3,238	18.9	1,027	256,755	244,272	75	1,428	77	213,697	68
Hawaii	2	20.7	38	15.5	321	2,899	2,748	73	1,126	23	2,479	21
Oregon	16	39.2	282	17.8	700	20,441	19,680	70	1,244	49	18,499	46
Washington	25	43.2	478	18.9	818	31,178	30,246	63	1,198	52	28,275	48
Outlying areas 1/	21	50.3	372	17.5	880	29,378	24,750	67	1,164	59	21,251	50

1/ Includes Puerto Rico and other outlying areas.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 50

Medicare home health agency services, persons served, visits, visit charges, and program payments, by demographic characteristics: Calendar year 1988

Demographic characteristic	Persons served		Visits			Total charges	Visit charges				Program payments		
	Number in thousands	Per 1,000 enrollees	Number in thousands	Per person served	Per 1,000 enrollees	in thousands	Amount in thousands	Per visit	Per person served	Per enrollee	Amount in thousands	Per person served	Per enrollee
Total	1,602	48.6	37,713	23.5	1,144	$2,453,974	$2,341,441	$62	$1,462	$71	$1,945,768	$1,215	$59
Age													
Under age 65 years	93	30.1	2,663	28.5	859	178,052	165,281	62	1,770	53	137,572	1,473	44
65-69 years	365	38.6	8,126	22.3	858	536,352	513,767	63	1,407	54	424,713	1,163	45
70-74 years	339	43.8	7,791	23.0	1,005	507,606	486,859	62	1,435	63	403,498	1,190	52
75-79 years	345	59.5	8,016	23.3	1,384	519,165	496,544	62	1,441	86	411,642	1,195	71
80-84 years	264	70.1	6,321	24.0	1,679	405,742	388,179	61	1,472	103	323,498	1,227	86
85 and over	196	63.1	4,796	24.5	1,546	307,056	290,810	61	1,485	94	244,845	1,251	79
Sex													
Male	581	41.7	13,317	22.9	956	873,824	829,606	62	1,428	60	690,477	1,189	50
Female	1,021	53.6	24,396	23.9	1,281	1,580,150	1,511,836	62	1,481	79	1,255,291	1,230	66
Medicare status													
Aged	1,508	52.3	35,105	23.4	1,218	2,279,424	2,179,426	63	1,471	76	1,810,921	1,227	63
Disabled	93	30.1	2,608	26.1	840	174,550	162,015	64	1,655	53	134,847	1,341	43

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 51

Medicare home health agency services, persons served, visits, total charges, and program payments, by type of agency and number of visits: Calendar year 1988

Type of agency and number of visits	Persons served		Visits		Total charges		Program payments	
	Number in thousands	Percent	Number in thousands	Percent	Amount in thousands	Percent	Amount in thousands	Percent
All agencies 1/								
Total	1,602	100.0	37,713	100.0	$2,454,455	100.0	$1,945,768	100.0
1-9 visits	665	41.5	3,224	8.5	226,796	9.2	179,327	9.2
10-19 visits	393	24.5	5,441	14.4	374,302	15.2	295,910	15.2
20-29 visits	190	11.9	4,557	12.1	306,822	12.5	243,181	12.5
30-39 visits	105	6.6	3,590	9.5	237,685	9.7	189,234	9.7
40-49 visits	66	4.1	2,898	7.7	189,268	7.7	150,104	7.7
50-99 visits	118	7.4	8,057	21.4	515,609	21.0	408,227	21.0
100 visits and over	64	4.0	9,946	26.4	603,974	24.6	479,784	24.7
Visiting nurse association								
Total	367	100.0	7,694	100.0	481,424	100.0	408,790	100.0
1-9 visits	165	45.0	790	10.3	53,818	11.2	43,953	10.8
10-19 visits	92	24.9	1,264	16.4	84,548	17.6	69,742	17.1
20-29 visits	41	11.3	989	12.8	64,244	13.3	53,591	13.1
30-39 visits	22	6.0	748	9.7	47,701	9.9	40,229	9.8
40-49 visits	13	3.4	551	7.2	34,547	7.2	29,202	7.1
50-99 visits	23	6.2	1,538	20.0	93,823	19.5	80,171	19.6
100 visits and over	12	3.2	1,814	23.6	102,744	21.3	91,903	22.5
Combined government and voluntary								
Total	11	100.0	200	100.0	11,287	100.0	9,996	100.0
1-9 visits	6	50.2	28	13.8	1,710	15.2	1,471	14.7
10-19 visits	3	23.2	36	18.1	2,171	19.2	1,882	18.8
20-29 visits	1	11.8	32	15.9	1,892	16.8	1,631	16.3
30-39 visits	1	5.4	21	10.4	1,159	10.3	1,027	10.3
40-49 visits	(2/)	2.5	12	6.2	712	6.3	625	6.3
50-99 visits	1	4.9	38	19.0	2,063	18.3	1,835	18.4
100 visitsand over	(2/)	2.0	33	16.5	1,579	14.0	1,525	15.3
Government								
Total	140	100.0	2,991	100.0	157,582	100.0	137,689	100.0
1-9 visits	65	46.7	307	10.3	17,598	11.2	15,110	11.0
10-19 visits	33	23.9	460	15.4	25,927	16.5	21,983	16.0
20-29 visits	14	10.3	343	11.5	18,974	12.0	16,103	11.7
30-39 visits	8	5.5	261	8.7	14,121	9.0	12,171	8.8
40-49 visits	5	3.4	207	6.9	11,070	7.0	9,585	7.0
50-99 visits	9	6.5	630	21.1	32,680	20.7	28,800	20.9
100 visits and over	5	3.8	784	26.2	37,212	23.6	33,937	24.6

See footnotes at end of table.

Table 51—Continued

Medicare home health agency services, persons served, visits, total charges, and program payments, by type of agency and number of visits: Calendar year 1988

Type of agency and number of visits	Persons served		Visits		Total charges		Program payments	
	Number in thousands	Percent	Number in thousands	Percent	Amount in thousands	Percent	Amount in thousands	Percent
Hospital-based								
Total	412	100.0	8,388	100.0	$584,911	100.0	$468,309	100.0
1-9 visits	184	44.7	900	10.7	68,212	11.7	53,916	11.5
10-19 visits	104	25.2	1,435	17.1	106,170	18.2	84,015	17.9
20-29 visits	48	11.5	1,138	13.6	81,843	14.0	65,575	14.0
30-39 visits	25	6.1	855	10.2	60,400	10.3	48,610	10.4
40-49 visits	15	3.6	657	7.8	45,604	7.8	36,658	7.8
50-99 visits	25	6.1	1,696	20.2	114,568	19.6	92,509	19.8
100 visits and over	11	2.8	1,706	20.3	108,114	18.5	87,026	18.6
Proprietary								
Total	425	100.0	12,606	100.0	837,566	100.0	625,968	100.0
1-9 visits	146	34.4	714	5.7	50,927	6.1	38,153	6.1
10-19 visits	99	23.3	1,384	11.0	96,498	11.5	72,448	11.6
20-29 visits	55	13.0	1,331	10.6	90,732	10.8	68,216	10.9
30-39 visits	33	7.8	1,140	9.0	76,551	9.1	57,594	9.2
40-49 visits	23	5.4	1,008	8.0	67,099	8.0	50,279	8.0
50-99 visits	43	10.1	2,923	23.2	192,265	23.0	143,384	22.9
100 visits and over	26	6.1	4,105	32.6	263,495	31.5	195,895	31.3
Private nonprofit								
Total	227	100.0	5,467	100.0	355,931	100.0	275,242	100.0
1-9 visits	90	39.6	445	8.1	31,692	8.9	24,479	8.9
10-19 visits	58	25.4	801	14.6	54,610	15.3	42,364	15.4
20-29 visits	28	12.3	672	12.3	45,290	12.7	35,027	12.7
30-39 visits	15	6.8	526	9.6	34,953	9.8	27,381	9.9
40-49 visits	10	4.3	431	7.9	27,877	7.8	21,882	8.0
50-99 visits	17	7.5	1,163	21.3	75,346	21.2	57,674	21.0
100 visits and over	9	4.1	1,429	26.1	86,163	24.2	66,435	24.1

1/ Includes rehabilitation facility and skilled nursing facility based agencies not shown separately.
2/ Less than 500 persons served.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 52
Types of Medicare home health agencies, persons served, visits, and charges, by type of visit: Calendar year 1988

Type of visit	All agencies	Type of agency: Visiting nurse association	Combined government and voluntary	Government	Hospital based	Proprietary	Private nonprofit	Other 1/
Persons served in thousands								
Total 2/	1,602	367	11	140	412	425	227	18
Nursing care	1,449	331	10	129	373	386	204	16
Home health aide	609	126	3	49	141	198	86	7
Physical therapy	467	115	3	32	119	125	66	6
Other 3/	279	74	1	11	70	80	39	4
Percent of persons served								
Total 2/	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nursing care	90.5	90.2	91.5	91.9	90.4	90.6	89.9	89.7
Home health aide	38.0	34.2	27.2	35.1	34.2	46.4	37.8	36.5
Physical therapy	29.1	31.3	27.8	23.2	28.9	29.4	28.8	35.1
Other 3/	17.4	20.2	7.2	7.8	17.0	18.7	17.3	19.7
Visits in thousands								
Total	37,713	7,694	200	2,991	8,388	12,606	5,467	367
Nursing care	19,289	4,122	109	1,494	4,515	6,113	2,754	180
Home health aide	12,739	2,259	53	1,124	2,513	4,833	1,845	110
Physical therapy	4,352	966	33	296	1,038	1,290	672	57
Other 3/	1,333	346	5	76	321	368	197	20
Percent of visits								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nursing care	51.1	53.6	54.7	50.0	53.8	48.5	50.4	49.1
Home health aide	33.8	29.4	26.6	37.6	30.0	38.3	33.7	30.0
Physical therapy	11.5	12.6	16.3	9.9	12.4	10.2	12.3	15.5
Other 3/	3.5	4.5	2.4	2.5	3.8	2.9	3.6	5.4
Visits charges in thousands								
Total	$2,341,551	$463,410	$10,918	$148,984	$559,013	$798,179	$335,979	$25,068
Nursing care	1,310,818	277,069	6,782	83,442	326,205	420,054	184,095	13,172
Home health aide	629,001	94,955	1,920	43,509	129,719	260,559	92,004	6,335
Physical therapy	298,902	64,973	1,888	17,004	76,291	89,340	45,304	4,100
Other 3/	102,796	26,405	327	5,026	26,782	28,221	14,574	1,461
Percent of visit charges								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Nursing care	56.0	59.8	62.1	56.0	58.4	52.6	54.8	52.5
Home health aide	26.9	20.5	17.6	29.2	23.2	32.6	27.4	25.3
Physical therapy	12.8	14.0	17.3	11.4	13.6	11.2	13.5	16.4
Other 3/	4.4	5.7	3.0	3.4	4.8	3.5	4.3	5.8

See footnotes at end of table.

Table 52—Continued
Types of Medicare home health agencies, persons served, visits, and charges, by type of visit: Calendar year 1988

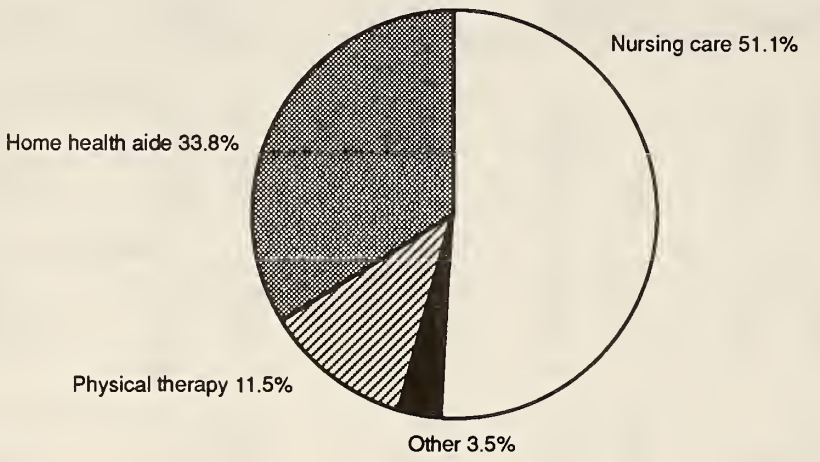
Type of visit	All agencies	Type of agency						
		Visiting nurse association	Combined government and voluntary	Government	Hospital based	Proprietary	Private nonprofit	Other 1/
Average number of visits per person served								
Total	23.5	20.9	17.6	21.4	20.3	29.6	24.1	20.4
Nursing care	13.3	12.4	10.5	11.6	12.1	15.9	13.5	11.2
Home health aide	20.9	18.0	17.2	22.9	17.8	24.5	21.5	16.8
Physical therapy	9.3	8.4	10.3	9.1	8.7	10.3	10.2	9.0
Other 3/	4.8	4.7	5.9	7.0	4.6	4.6	5.0	5.6
Average visit charge per visit								
Total	$62	$60	$55	$50	$67	$63	$61	$68
Nursing care	68	67	62	56	72	69	67	73
Home health aide	49	42	36	39	52	54	50	58
Physical therapy	69	67	58	57	73	69	67	72
Other 3/	77	76	67	66	84	77	74	73
Average visit charge per person served								
Total	$1,462	$1,262	$961	$1,065	$1,355	$1,876	$1,478	$1,395
Nursing care	904	836	652	649	875	1,089	901	817
Home health aide	1,033	756	621	885	919	1,319	1,070	966
Physical therapy	640	564	599	525	641	714	691	650
Other 3/	369	356	398	459	382	354	371	413

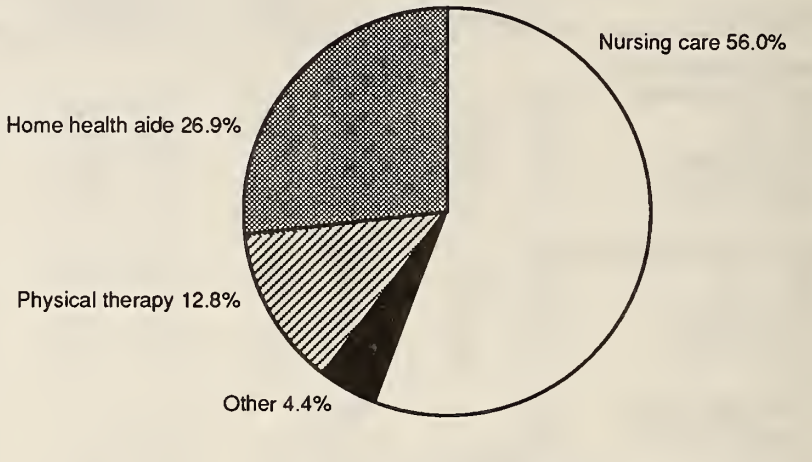
1/ Includes rehabilitation and skilled nursing facility-based agencies.
2/ Detail does not add to total because persons may receive more than one type of service.
3/ Includes speech or occupational therapy, medical social services, and other health disciplines.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Figure 14

Percent distribution of Medicare home health agency visits and visit charges, by type of visit: Calendar year 1988

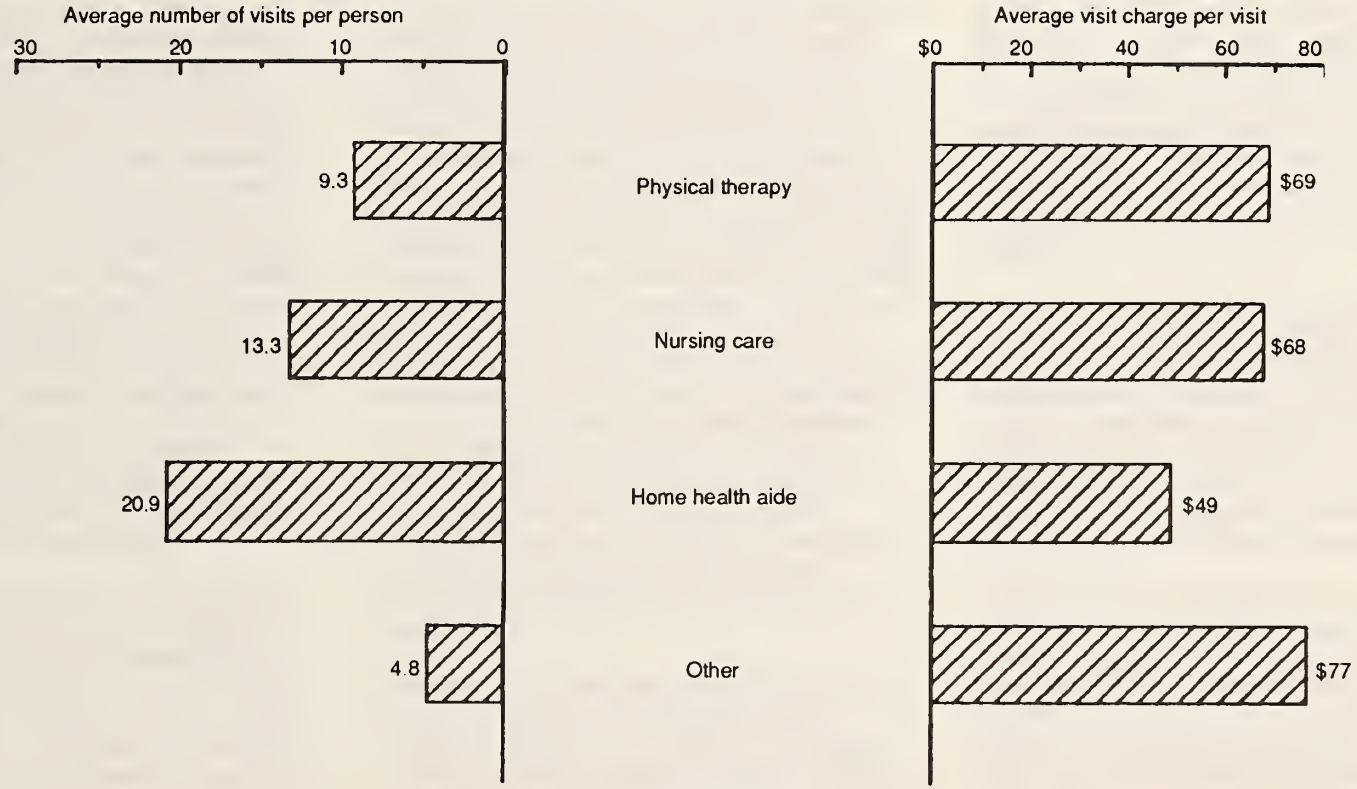




SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Figure 15

Average number of visits per person and average visit charges per visit for Medicare home health agency services, by type of visit: Calendar year 1988



SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

VIII. Summary of the supplementary medical insurance benefit for physician services

Physician services—those provided by doctors of medicine and osteopathy—represent services covered by Medicare Part B supplementary medical insurance (SMI). Part B also pays for specified covered services provided by limited licensed practitioners (LLP's)—e.g., doctors of dentistry or of dental oral surgery, chiropractors, doctors of podiatry or surgical chiropody, and doctors of optometry—and for covered services and supplies provided by suppliers—e.g., medical supply and ambulance companies, independent laboratories (billing independently), portable X-ray suppliers (billing independently), and voluntary health or charitable organizations. In addition, SMI helps pay for covered services received from certain specially qualified practitioners, such as certified registered nurse anesthetists, certified nurse midwives, physician assistants, and clinical psychologists.

Physician and supplier services covered by the Medicare Part B program include diagnosis; therapy; surgery; consultation; home, office, and institutional visits; diagnostic X-ray tests; X-ray therapy; outpatient hospital diagnostic services; outpatient physical therapy and speech pathology; rental or purchase of durable medical equipment; surgical dressings, splints, casts, and other devices used for reduction of fractures and dislocations; ambulance services; institutional and home dialysis; prosthetic devices; and rural health clinic services.

Medicare allows physicians to determine how they will be paid for covered services rendered to Medicare beneficiaries. If the physician elects to be paid directly by the Part B carrier (the fiscal agent authorized by Medicare to determine amounts of payment due and to make such payments for covered services), the payments are deemed "assigned" and the physician agrees to accept, as payment in full, the amount the carrier determines as reasonable—i.e., the allowed charge. The program reimburses 80 percent of the allowed charge (after the beneficiary has met the annual deductible amount), and the beneficiary is responsible for the 20-percent coinsurance amount required by law. If the physician does not accept assignment, the patient is responsible for the entire submitted charge and must submit the bill to the carrier for reimbursement. In such cases, the beneficiary is responsible for paying the physician the difference (the reduction amount) between the physician's submitted charge and the Medicare allowed charge, as well as any deductible or coinsurance amounts. In 1988, the average reduction amount was about 30 percent. Beginning September 1, 1990, physicians (even those who do not accept assignment) are responsible for filing all claims for Medicare beneficiaries.

Between 1967 to 1983, the average annual rate of growth of Medicare benefit payments for physician services was 17 percent. To constrain the rate of growth in Medicare Part B physician expenditures, the Deficit Reduction Act (DEFRA) of 1984 placed a freeze on Medicare physician payment levels for a 15-month period beginning July 1, 1984. The freeze period payment levels were extended by Congress through April 1986 for participating physicians and through December 1986 for nonparticipating physicians.

DEFRA also created the Medicare participating physician and supplier program (MPP). Under the MPP, physicians who accept assignment for all Medicare services for that year thereby agree to accept the allowed charge as payment in full. Medicare provided incentives to encourage physicians to participate in the MPP program. The effort resulted in a substantial increase in the rate of physician claims assigned, reaching approximately 74 percent in 1988; in 1983, the assignment rate was 51 percent (based on the ratio of assigned allowed charges to total allowed charges).

The Consolidated Omnibus Budget Reconciliation Act of 1985 and the Omnibus Budget Reconciliation Act (OBRA) of 1986 mandated the Secretary of the Department of Health and Human Services to study and develop a relative value scale for paying physician services under the Medicare program. The primary concern of Congress was, again, to control escalating physician costs in the Medicare program.

In 1989, Congress passed OBRA-89 (Public Law 101-239), which mandated the creation and implementation of a Medicare fee schedule (MFS) based on the OBRA 1986 mandated relative scale, to pay for physician services under the Medicare program. The phase-in of the MFS will begin in 1992 and will be completely implemented in 1996. The law has three basic characteristics; the MFS, volume performance standards to control expenditures, and protection of the beneficiary. Important provisions of the law include the following:

- The MFS creates a payment rate for a physician procedure that reflects the product of the relative value, the geographic adjustment factor for each locality, and a conversion factor to insure that the payment is budget neutral (See Glossary).

- Non-participating physicians will be paid 95 percent of the MFS amount.
- There will be a limit on beneficiary balance billing. Starting in 1993, the most a non-participating physician can charge is 9.25 percent above the reduced MFS amount (i. e., 1.0925 x .95 MFS).

The use and cost of physician and supplier services shown in this section of the report are measured by the number of persons served, the number of services, submitted charges, allowed charges, benefit payments (See *Glossary*), and program payments. Beneficiary protection against balance billing liability (in excess of Medicare cost sharing) is measured by the Medicare assignment rate and reduction rate. Generally, a higher assignment rate and a lower reduction rate on unassigned claims will reduce the beneficiary out-of-pocket liability.

Table 53: Medicare supplementary medical insurance benefit payments, by type of provider: Calendar year 1967-88

- Part B (SMI) benefit payments have risen dramatically since the inception of the program, going from $1.2 billion in 1967 to $34.0 billion in 1988, an average annual rate of change (AARC) of 15 percent.
- The proportion of SMI benefit payments, by type of provider, has changed substantially from 1967-88.
- The share of Part B benefit payments for physicians and suppliers declined from 95 percent ($1.1 billion) of all SMI benefit payments ($1.2 billion) in 1967 to 75 percent ($25.4 billion) of all SMI payments ($34.0 billion) in 1988.
- The share of benefit payments for outpatient services increased dramatically, going from 2 percent ($26.0 million) in 1967 to 19 percent ($6.5 billion) in 1988.
- The share of alternative payment systems (HMOs, GPPPs, and CMPs) has grown steadily since the early 1980s. By 1988, 6 percent ($2.0 billion) of all SMI benefit payments were attributable to alternative payment systems.

Table 54: Medicare assignment rates and ratio of submitted to allowed charges for physician and supplier services, by State: Calendar years 1983, 1985, and 1988

- There was substantial variability in the assignment rate by State in 1988. For example, the assignment rate ranged from 28 percent in Idaho to 99 percent in Massachusetts.
- One-fifth (10) of all States had an assignment rate of 85 percent or higher; most of these States were in the Northeast Region.
- On the other hand, 3 States—Idaho (28 percent), South Dakota (32 percent), and Wyoming (33 percent)—had a very low assignment rate.
- The ratio of physician submitted charges to Medicare allowed charges increased from 1.31 in 1983 to 1.38 in 1985, before dropping back to 1.32 in 1988.
- By State, the ratio of submitted charges to allowed charges ranged from 1.18 in Massachusetts to 1.47 in New York.

Table 55: Users, services, submitted and allowed charges, and reduction for Medicare physician and supplier services, by type of service: Calendar year 1988

- Medicare physician and supplier allowed charges are concentrated in two types of service. Medical care (primarily physician visits) and surgery accounted for 30 percent ($9.32 billion) and 31 percent ($9.33 billion), respectively, of all allowed charges ($31.13 billion) for physician and supplier services (Figure 16).
- Diagnostic X-ray services accounted for 9 percent ($2.9 billion), and diagnostic laboratory services comprised 10 percent ($3.1 billion) of all physician and supplier allowed charges.
- Together, these four types of services represented almost four-fifths ($24.6 billion) of all allowed Medicare charges for physician and supplier services.
- The average allowed charge per user of physician and supplier services ranged from $12 for pneumococcal vaccine to $1,073 for radiation therapy and $1,329 for monthly capitation payments (dialysis).
- The number of services per user varied substantially among the different types of services, ranging from a low of 1.1 and 1.2 services per user for surgical second opinion and surgical third opinion, respectively, to a high of 16.1 services per user for radiation therapy.
- The assignment rate, based on submitted charges, ranged from a low of 63 percent for pneumococcal vaccine to a high of 97 percent for monthly capitation payment (dialysis).

Table 56: Users, services, submitted and allowed charges, and reduction for Medicare physician and supplier services, by place of service: Calendar year 1988

- Of all allowed Medicare physician and supplier charges ($31.1 billion), 38 percent ($12.0 billion) were attributable to services provided on an inpatient hospital basis (Figure17).
- Another 31 percent ($9.5 billion) reflected services provided in a physician's office; care rendered in hospital outpatient facilities accounted for 14 percent ($4.2 billion).
- The percent of submitted charges assigned were highest for services provided in ambulatory surgical centers (92 percent), the home (92 percent), independent laboratories (96 percent), and independent kidney disease treatment center (94 percent). However, services provided in these settings, together, accounted for only 12 percent ($4.1 billion) of all physician and supplier assigned charges ($34.6 billion).
- Assignment rates for physician and supplier services in the office and the inpatient setting were 69 percent and 79 percent, respectively; services provided in these settings accounted for 66 percent ($22.9 billion) of all assigned charges ($34.6 billion).
- The number of services per user varied substantially among the different types of services, ranging from a low of 2.8 services for ambulatory surgical centers to a high of 14.2 services for office visits and 21.9 services for inpatient hospitals. NOTE: Services do not equate to visits. One visit may entail any number of services.

Table 57: Users, services, submitted and allowed charges, and reduction for Medicare physician and supplier services, by physician specialty: Calendar year 1988

- In 1988, internists and radiologists served more Medicare beneficiaries than did any other type of physician specialty; 47 percent (12.4 million) of all persons served (26.3 million) received physician services from internists, and 46 percent (12.1 million) were served by radiologists.
- Based on the amount of allowed charges, the leading physician specialties were internal medicine ($4.4 billion or 14 percent), ophthalmology ($3.3 billion or 11 percent), and radiology ($2.4 billion or 8 percent). Together they accounted for $10.1 billion or 32 percent of all physician and supplier allowed charges $31.1 billion).
- Supplier services accounted for $4.1 billion or 13 percent of all physician and supplier allowed charges.
- For all types of physician specialties (including suppliers), the average allowed charge per user was $1,186 in 1988.
- By physician specialty, the average allowed charges per user were highest for persons who used the services of specialists in radiation therapy ($1,150) and thoracic surgery ($1,247).
- The lowest average charges per user were for gynecology services ($74) and for optometrist services ($77).
- Based on the physician submitted charges, the highest assignment rates among the leading physician specialties were for roentgenology, radiology (95 percent), and pathological anatomy (94 percent).

Table 58: Users, services, submitted and allowed charges, and reduction for Medicare physician and supplier services, by area of residence: Calendar year 1988

- Among the four U.S. census regions, the average allowed charge per user was highest in the West Region ($1,389), followed by the Northeast ($1,212), the South ($1,203), and the North Central Region ($1,044).
- By division, there was marked variation in the average allowed charge per user. The highest average charge in the Pacific Division ($1,490) was 66 percent higher than the average charge in the West North Central Division ($900).
- Among the regions, assignment rates on submitted charges ranged from a low of 74 percent in the West Region to a high of 86 percent in the Northeast.
- There was substantial variation in assignment rates among the divisions, ranging from 68 percent in the West North Central and Mountain Divisions to 87 percent in Middle Atlantic.
- The average number of services per user was highest in the South and West Regions (28.7), followed by the Northeast (27.7) and the North Central (26.7).
- By division, the number of services ranged from a low of 24.5 services per person in the West North Central Division to a high of 29.7 per person in the Pacific Division.

Table 53
Medicare supplementary medical insurance benefit payments 1/, by type of provider: Selected calendar years 1967-88

	1967	1970	1975	1983	1984	1985	1986	1987	1988
					Dollars in millions				
Total	$1,197	$1,975	$4,273	$18,106	$19,661	$22,947	$26,239	$30,820	$33,969
Physicians and suppliers 2/	1,135	1,801	3,454	14,287	15,715	17,869	19,937	23,503	25,353
Outpatient facilities 3/	26	117	652	3,387	3,450	4,304	5,144	5,903	6,549
Alternative payment systems 4/	19	26	80	410	464	720	1,113	1,361	2,019
Home health agencies 5/	17	31	87	32	32	54	45	53	48
					Percent distribution				
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Physicians and suppliers 2/	94.8	91.2	80.8	78.9	79.9	77.9	76.0	76.3	74.6
Outpatient facilities 3/	2.2	5.9	15.3	18.7	17.5	18.8	19.6	19.2	19.3
Alternative payment systems 4/	1.6	1.3	1.9	2.3	2.4	3.1	4.2	4.4	5.9
Home health agencies 5/	1.4	1.6	2.0	0.2	0.2	0.2	0.2	0.2	0.1

NOTE: Data for 1975 and after include payments for disabled and end stage renal disease beneficiaries not covered previously.

1/ Benefit payments shown in this table, as reported by the Office of the Actuary (OACT), are substantially higher than the corresponding program payments reported in this compendium. The difference is due, for the most part, to OACT's process of projecting total payments based on a complete (100 percent) population of bill records. The program payments reported in this compendium reflect only those bill records received and processed in HCFA as of a given processing cut-off date.
2/ Includes independent laboratories.
3/ Includes outpatient hospital facilities, end stage renal disease free-standing facilities, rural health clinics, and outpatient rehabilitation facilities.
4/ Includes health maintenance organizations, group practice prepayment plans, competitive medical plans, and other pre-paid health plans.
5/ As a result of the Omnibus Reconciliation Act of 1980, most HHA services were covered under the hospital insurance program.

SOURCE: Health Care Financing Administration, Office of the Actuary.

Table 54

Medicare assignment rates and ratio of submitted to allowed charges for physician and supplier services, by State: Calendar years 1983, 1985 and 1988

State	Assignment rate 1/			Ratio of submitted to allowed charges		
	1983	1985	1988	1983	1985	1988
U.S. total	0.51	0.67	0.74	1.31	1.38	1.32
Alabama	0.56	0.76	0.85	1.35	1.43	1.31
Alaska	0.46	0.57	0.70	1.33	1.35	1.36
Arizona	0.34	0.55	0.64	1.30	1.35	1.27
Arkansas	0.58	0.84	0.85	1.32	1.37	1.29
California	0.53	0.70	0.78	1.28	1.36	1.24
Colorado	0.42	0.57	0.61	1.37	1.45	1.42
Connecticut	0.44	0.64	0.79	1.31	1.48	1.37
Delaware	0.75	0.83	0.87	1.28	1.37	1.33
D. C.	0.76	0.85	0.83	1.33	1.41	1.33
Florida	0.34	0.66	0.71	1.29	1.34	1.22
Georgia	0.55	0.66	0.73	1.30	1.38	1.30
Hawaii	0.42	0.64	0.76	1.34	1.40	1.40
Idaho	0.22	0.34	0.28	1.32	1.37	1.32
Illinois	0.36	0.55	0.63	1.29	1.36	1.32
Indiana	0.28	0.50	0.63	1.33	1.36	1.29
Iowa	0.33	0.50	0.60	1.34	1.38	1.31
Kansas	0.48	0.74	0.84	1.30	1.34	1.33
Kentucky	0.39	0.55	0.71	1.29	1.32	1.26
Louisiana	0.37	0.65	0.73	1.37	1.40	1.35
Maine	0.73	0.82	0.89	1.28	1.34	1.27
Maryland	0.72	0.84	0.92	1.30	1.38	1.31
Massachusetts	0.85	0.95	0.99	1.28	1.38	1.18
Michigan 2/	0.79	0.78	0.74	1.32	1.53	1.30
Minnesota	0.27	0.49	0.68	1.30	1.34	1.39
Mississippi	0.58	0.67	0.68	1.37	1.41	1.39
Missouri	0.44	0.64	0.73	1.28	1.32	1.28
Montana	0.19	0.42	0.48	1.27	1.31	1.29
Nebraska	0.19	0.34	0.51	1.28	1.37	1.26
Nevada	0.61	0.79	0.89	1.30	1.38	1.35
New Hampshire	0.51	0.66	0.65	1.32	1.42	1.39
New Jersey	0.58	0.65	0.69	1.34	1.43	1.38
New Mexico	0.41	0.61	0.65	1.34	1.38	1.33
New York	0.62	0.73	0.77	1.37	1.47	1.47
North Carolina	0.49	0.65	0.74	1.31	1.39	1.34
North Dakota	0.29	0.33	0.42	1.27	1.33	1.28
Ohio	0.34	0.52	0.65	1.32	1.38	1.28
Oklahoma	0.30	0.45	0.56	1.37	1.40	1.38
Oregon	0.25	0.43	0.52	1.28	1.30	1.28
Pennsylvania	0.76	0.89	0.92	1.28	1.36	1.30
Rhode Island	0.90	0.92	0.95	1.39	1.43	1.41
South Carolina	0.57	0.80	0.79	1.32	1.43	1.42
South Dakota	0.18	0.25	0.32	1.29	1.33	1.31
Tennessee	0.46	0.58	0.72	1.34	1.38	1.33
Texas	0.53	0.63	0.72	1.37	1.43	1.35
Utah	0.45	0.64	0.75	1.27	1.31	1.32
Vermont	0.58	0.64	0.91	1.31	1.40	1.33
Virginia	0.56	0.69	0.75	1.31	1.36	1.41
Washington	0.30	0.44	0.53	1.27	1.33	1.27
West Virginia	0.51	0.69	0.80	1.39	1.48	1.34
Wisconsin	0.32	0.55	0.57	1.25	1.30	1.27
Wyoming	0.26	0.42	0.33	1.32	1.40	1.39

1/ Assignment rates are calculated based on the ratio of assigned allowed charges to total allowed charges (which reflects both assigned and unassigned allowed charges) for all physician services. Suppliers' services are excluded from this table.

2/ We are aware that the assignment status of claims from Michigan beneficiaries may have been improperly coded in the BMAD data. However, since there was no way to pinpoint the precise coding problems and correct them, 1985 statistics for Michigan may be inaccurate and should be used with caution.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Office of Statistics and Data Management; data developed from the 1983 Bill Summary Record and 1985 and 1988 BMAD Beneficiary Files.

Table 55

Users, services, submitted and allowed charges, and reduction for Medicare physician and supplier services, by type of service: Calendar year 1988

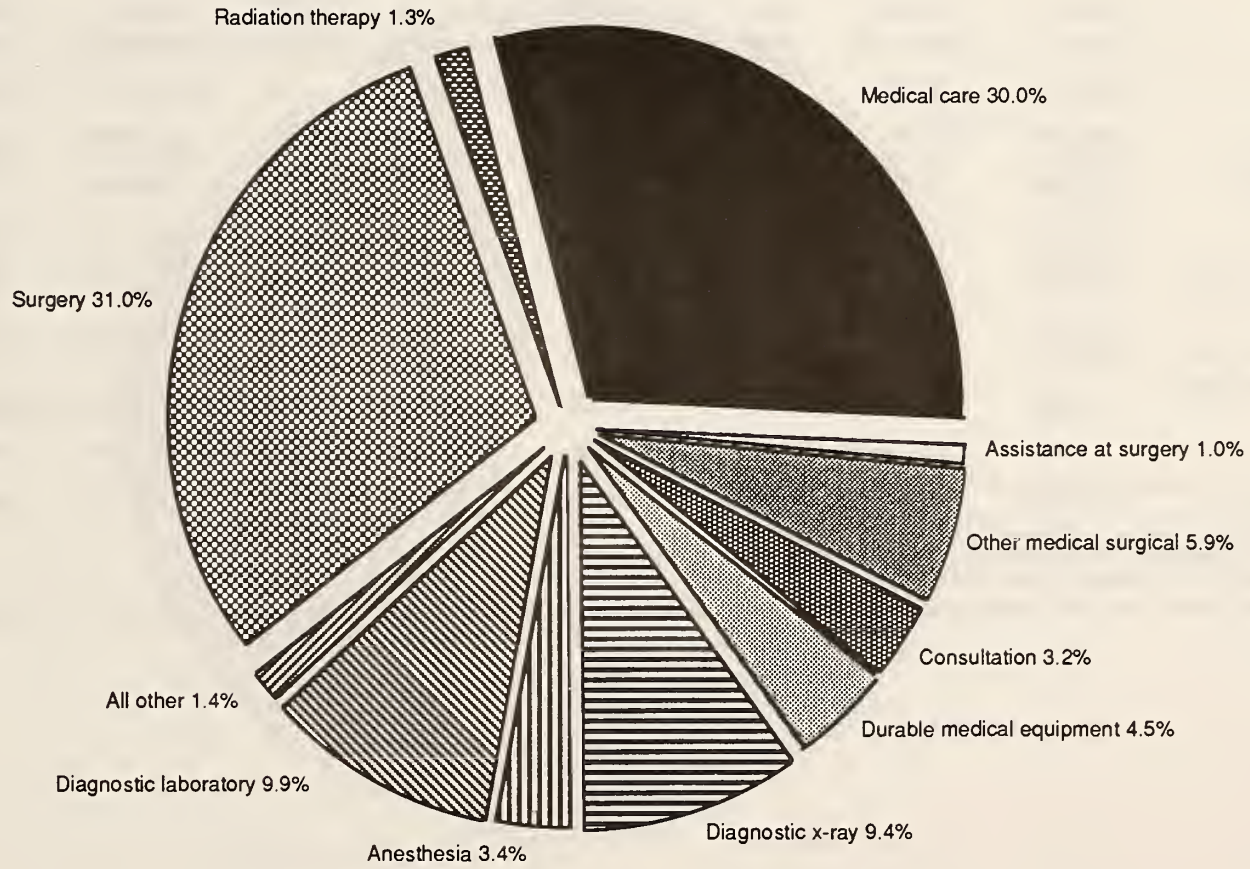
Type of service	Number of users 1/	Services		Submitted charges			Allowed charges		Reduction 3/	
		Number in thousands	Per user	Amount in thousands	Assigned in thousands	Percent of charges assigned 2/	Amount in thousands	Per user	Amount in thousands	As percent of submitted charges
Total	26,258,940	728,462	27.7	$44,190,035	$34,567,321	78	$31,133,366	$1,186	$13,056,668	30
Medical care	25,035,720	316,645	12.6	12,704,347	9,135,113	72	9,319,741	372	3,384,605	27
Diagnostic laboratory	19,613,320	211,239	10.8	4,712,612	4,109,656	87	3,070,341	157	1,642,270	35
Diagnostic x-ray	15,702,620	69,830	4.4	4,008,463	3,080,812	77	2,923,467	186	1,084,995	27
Surgery	12,639,380	44,630	3.5	13,392,176	10,685,202	80	9,328,113	738	4,064,062	30
Other medical supplies	6,363,340	42,136	6.6	2,451,307	2,027,353	83	1,828,706	287	622,601	25
Consultation	5,668,320	13,503	2.4	1,352,291	1,098,644	81	1,007,629	178	344,662	25
Anesthesia	3,370,320	4,524	1.3	1,915,014	1,264,008	66	1,052,275	312	862,738	45
Durable medical equipment	1,894,320	14,765	7.8	1,797,650	1,590,500	88	1,394,057	736	403,593	22
Assistance at surgery	837,680	1,110	1.3	544,777	431,163	79	321,570	384	223,207	41
Ambulatory surgical center (facility usage)	419,300	664	1.6	401,241	358,276	89	260,726	622	140,514	35
Radiation therapy	384,380	6,183	16.1	574,672	467,799	81	412,322	1,073	162,350	28
Pneumococcal vaccine	311,520	491	1.6	5,252	3,307	63	3,852	12	1,400	27
Monthly capitation payment (dialysis)	44,380	589	13.3	64,138	62,205	97	58,981	1,329	5,156	8
Surgical second opinion	21,360	24	1.1	3,169	2,669	84	2,007	94	1,162	37
Rental supplies in the home	19,020	123	6.5	13,293	11,105	84	4,995	263	8,297	62
Kidney donor	1,280	3	2.7	915	862	94	548	429	366	40
Hospice	940	1	2.1	88	67	76	72	77	16	19
Whole blood or packed cells	740	1	1.5	43	31	72	35	48	8	18
Surgical third opinion	580	1	1.2	147	127	87	87	150	59	41
Invalid codes	103,220	1,993	19.3	248,430	238,414	96	143,832	1,393	104,597	42

1/ Detail does not sum to total because beneficiaries may use more than one service.
2/ Ratio of assigned submitted charges to total submitted charges. Includes charges for supplier services.
3/ The difference between the physician/supplier submitted charge and the allowed charge approved by Medicare.

SOURCE: Health Care Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Figure 16

Percent distribution of Medicare allowed charges for physician and supplier services, by type of service: Calendar year 1988



NOTE: Allowed charges are $31.1 billion.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 56

Users, services, submitted and allowed charges, and reduction for Medicare physician and supplier services, by place of service: Calendar year 1988

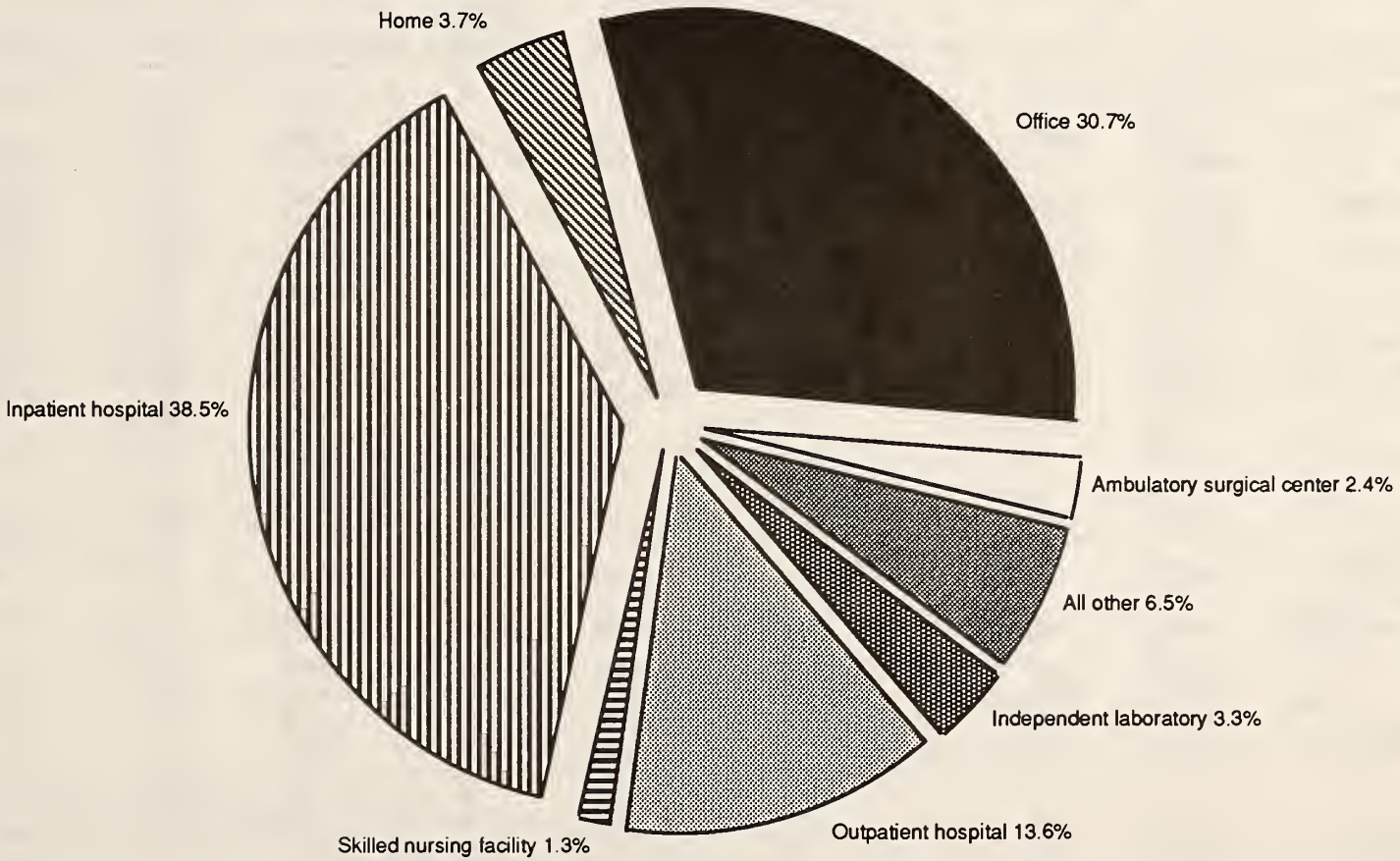
Place of service	Number of users 1/	Services		Submitted charges			Allowed charges		Reduction 3/	
		Number in thousands	Per user	Amount in thousands	Assigned in thousand	Percent of charges assigned 2/	Amount in thousands	Per user	Amount in thousands	As percent of submitted charges
Total	26,258,940	728,462	27.7	$44,190,035	$34,567,321	78	$31,133,366	$1,186	$13,056,668	30
Office visit	23,952,260	341,287	14.2	12,993,742	8,975,434	69	9,548,884	399	3,444,858	27
Outpatient hospital	12,628,000	51,797	4.1	6,143,176	5,008,984	82	4,230,176	335	1,912,999	31
Independent laboratory	11,266,300	90,890	8.1	1,637,937	1,571,232	96	1,022,303	91	615,633	38
Inpatient hospital	7,736,280	169,803	21.9	17,476,089	13,892,663	79	11,984,723	1,549	5,491,365	31
Home	2,138,440	19,387	9.1	1,521,574	1,393,988	92	1,167,562	546	354,012	23
Skilled nursing care facility	1,563,440	14,196	9.1	594,525	506,098	85	415,401	266	177,124	30
Nursing home	1,257,640	9,698	7.7	305,691	252,613	83	206,744	164	98,947	32
Ambulatory surgical centers	656,260	1,865	2.8	1,096,052	1,009,232	92	744,910	1,135	351,142	32
Independent kidney disease treatment center	48,240	472	9.8	84,128	79,400	94	47,309	981	36,819	44
Hospice	2,220	9	4.1	501	395	79	370	167	131	26
Other	3,917,920	29,053	7.4	2,338,613	1,877,278	80	1,764,979	450	573,634	25

1/ Detail does not sum to total because beneficiaries may use more than one service.
2/ Ratio of assigned submitted charges to total submitted charges. Includes charges for supplier services.
3/ The difference between the physician/supplier submitted charge and the allowed charge approved by Medicare.

SOURCE: Health Care Financing Adminstration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Figure 17

Percent distribution of Medicare allowed charges for physician and supplier services, by place of service: Calendar year 1988



NOTE: Allowed charges are $31.1 billion.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 57
Users, services, submitted and allowed charges, and reduction for Medicare physician and supplier services, by physician specialty: Calendar year 1988

Physician specialty 1/	Number of users 2/	Services		Submitted charges			Allowed charges		Reduction 4/	
		Number in thousands	Per user	Amount in thousands	Assigned in thousands	Percent of charges assigned 3/	Amount in thousands	Per user	Amount in thousands	As percent of submitted charges
Total, all specialties	26,258,940	728,462	30.1	$44,190,035	$34,567,321	78	$31,133,366	$1,186	$13,056,668	30
Allergy	167,840	3,590	21.4	55,145	36,778	67	39,926	238	15,219	28
Anesthesiology	3,299,620	5,616	1.7	1,942,070	1,264,983	65	1,083,430	328	858,639	44
Cardiovascular disease	4,990,520	34,851	7.0	2,538,449	2,056,749	81	1,870,596	375	667,852	26
Chiropractor	962,160	8,604	8.9	182,437	88,717	49	143,677	149	38,759	21
Clinic/group practice	5,753,460	45,205	7.9	2,644,896	2,031,900	77	1,798,078	313	846,817	32
Dermatology	2,559,180	13,289	5.2	593,030	425,727	72	450,178	176	142,851	24
Family practice	6,436,040	58,421	9.1	1,638,086	1,103,438	67	1,184,985	184	453,100	28
Gastroenterology	1,281,300	6,773	5.3	808,257	687,793	85	613,778	479	194,478	24
General practice	6,352,500	46,759	7.4	1,467,398	1,054,430	72	1,037,512	163	429,885	29
General surgery	3,719,740	16,449	4.4	2,741,341	2,202,375	80	1,847,133	497	894,207	33
Geriatrics	23,443	172	7.3	6,420	4,677	73	4,637	198	1,783	28
Gynecology (Osteopaths only)	48,200	97	2.0	6,254	4,537	73	3,565	74	2,689	43
Hand surgery	16,540	88	5.3	11,773	8,297	70	7,141	432	4,632	39
Internal medicine	12,406,080	152,012	12.3	6,007,334	4,449,745	74	4,401,814	355	1,605,520	27
Manipulative therapy (Osteopaths only)	88,060	815	9.3	23,791	17,160	72	16,510	187	7,281	31
Miscellaneous (incorporated ambulatory surgical centers)	893,040	3,887	4.4	562,385	508,726	90	374,711	420	187,674	33
Nephrology	373,700	5,299	14.2	448,373	413,029	92	287,884	770	160,488	36
Neurology	1,489,580	6,750	4.5	475,163	377,562	79	344,149	231	131,014	28
Neurological surgery	363,860	1,303	3.6	371,636	290,241	78	231,890	637	139,746	38
Nuclear medicine	145,340	363	2.5	35,686	28,322	79	25,479	175	10,207	29
Obstetrics (Osteopaths only)	1,960	11	5.6	484	366	76	324	166	159	33
Obstetrics/gynecology	1,086,540	3,277	3.0	298,982	213,292	71	182,763	168	116,219	39
Opthalmology (Osteopaths only)	77,540	211	2.7	32,021	27,023	84	22,219	287	9,802	31
Opthalmology	7,787,640	24,027	3.1	4,545,924	3,698,220	81	3,290,394	423	1,255,529	28
Optometrist	1,927,860	4,681	2.4	177,725	124,339	70	147,746	77	29,979	17
Oral surgery (Dentists only)	66,480	146	2.2	20,356	12,119	60	12,888	194	7,468	37
Orthopedic surgery	2,522,120	12,455	4.9	1,909,821	1,383,515	72	1,297,058	508	612,763	32
Other medical care	22,940	53	2.3	32,078	29,663	92	20,310	885	11,768	37
Otology, laryngology, rhinology	1,873,820	6,291	3.4	422,177	293,419	70	282,810	151	139,367	33

See footnotes at end of table.

Table 57—Continued
Users, services, submitted and allowed charges, and reduction for Medicare physician and supplier services, by physician specialty: Calendar year 1988

Physician specialty 1/	Number of users 2/	Services		Submitted charges			Allowed charges		Reduction 4/	
		Number in thousands	Per user	Amount in thousands	Assigned in thousands	Percent of charges assigned 3/	Amount in thousands	Per user	Amount in thousands	As percent of submitted charges
Pathological anatomy (Osteopaths only)	14,080	27	1.9	$1,676	$1,572	94	$1,134	$81	$542	32
Pathology	3,501,640	8,844	2.5	487,201	385,796	79	319,172	91	168,028	34
Pediatrics	141,360	936	6.6	39,323	33,883	86	26,613	188	12,710	32
Peripheral vascular disease or surgery (Osteopaths only)	22,720	93	4.1	18,196	14,962	82	10,923	481	7,273	40
Physical medicine and rehabilitation	347,020	3,243	9.3	163,854	149,412	91	110,696	319	53,157	32
Plastic surgery	270,560	983	3.6	215,364	168,845	78	125,331	463	90,032	42
Podiatry - surgical chirpody	3,157,240	15,897	5.0	665,038	528,000	79	482,513	153	182,524	27
Proctology	149,020	464	3.1	76,547	54,450	71	54,134	363	22,413	29
Psychiatry	745,440	7,854	10.5	522,654	434,959	83	336,004	451	186,050	36
Psychiatry, neurology (Osteopaths only)	21,100	96	4.5	8,196	7,568	92	5,215	247	2,981	36
Pulmonary disease	950,860	8,758	9.2	504,872	422,415	84	367,450	386	137,421	27
Radiation therapy	21,820	328	15.0	36,201	24,517	68	25,087	1,150	11,114	31
Radiology	12,149,800	55,891	4.6	3,220,247	2,486,673	77	2,364,761	195	855,485	27
Roentgenology, radiology (Osteopaths only)	106,020	511	4.8	$24,466	$23,217	95	$16,510	$156	$7,955	33
Thoracic surgery	669,180	2,252	3.4	1,161,019	993,496	86	834,548	1,247	326,470	28
Urology	2,293,860	14,032	6.1	1,312,407	944,266	72	912,715	398	399,691	30
Unknown	84,260	305	3.6	23,912	19,488	82	16,769	199	7,143	30
Suppliers services 5/	13,716,660	145,743	10.6	5,647,483	4,984,914	88	4,054,204	296	1,593,279	28
Invalid codes	—	710	—	61,887	51,746	—	46,002	—	16,505	—

1/ Physician specialty as defined in the *Health Care Financing Administration's Part B Medicare Annual Data Users' Manual* prepared by the Office of Statistics and Data Management.
2/ Detail does not sum to total because beneficiaries may use more than one service.
3/ Ratio of assigned submitted charges to total submitted charges. Includes charges for supplier services.
4/ The difference between the physician/supplier submitted charge and the allowed charge approved by Medicare.
5/ Represents supplier services provided by medical supply companies, ambulance service suppliers, independent laboratories (billing independently), portable x-ray suppliers (billing independently), voluntary health or charitable agencies, etc. nephrology, geriatrics, diagnostic laboratory, occupational therapy, physiotherapy, etc.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 58

Users, services, submitted and allowed charges, and reduction for Medicare physician and supplier services, by area of residence: Calendar year 1988

Area of residence	Number of users 1/	Services		Submitted charges			Allowed charges		Reduction 3/	
		Number in thousands	Per user	Amount in thousands	Assigned in thousands	Percent of charges assigned 2/	Amount in thousands	Per user	Amount in thousands	As percent of submitted charge
All areas	26,258,940	728,462	27.7	$44,190,035	$34,567,321	78	$31,133,366	$1,186	$13,056,668	30
United States	25,188,500	704,541	28.0	42,700,220	33,605,895	79	30,113,988	1,196	12,586,232	29
Northeast	5,766,960	159,853	27.7	10,427,327	8,994,645	86	6,987,676	1,212	3,439,650	33
North Central	6,453,000	172,470	26.7	9,366,370	7,100,885	76	6,738,214	1,044	2,628,156	28
South	8,758,420	251,460	28.7	14,813,860	11,557,543	78	10,540,325	1,203	4,273,535	29
West	4,210,120	120,760	28.7	8,092,664	5,952,823	74	5,847,773	1,389	2,244,891	28
New England	1,481,380	40,226	27.2	2,436,123	2,071,231	85	1,619,791	1,093	816,332	34
Connecticut	364,460	9,710	26.6	595,263	426,363	72	419,638	1,151	175,625	30
Maine	152,660	3,583	23.5	186,571	156,687	84	130,815	857	55,756	30
Massachusetts	663,960	19,288	29.0	1,224,402	1,127,441	92	792,840	1,194	431,561	35
New Hampshire	108,220	2,520	23.3	134,241	95,513	71	91,633	847	42,608	32
Rhode Island	130,720	3,839	29.4	226,906	210,526	93	136,375	1,043	90,530	40
Vermont	61,360	1,284	20.9	68,737	54,699	80	48,487	790	20,249	29
Middle Atlantic	4,285,580	119,625	27.9	7,991,203	6,923,413	87	5,367,885	1,253	2,623,318	33
New Jersey	847,740	22,646	26.7	1,519,125	1,112,989	73	1,039,882	1,227	479,242	32
New York	1,947,300	58,673	30.1	3,899,000	3,441,440	88	2,626,007	1,349	1,272,992	33
Pennsylvania	1,490,540	38,305	25.7	2,573,077	2,368,983	92	1,701,994	1,142	871,082	34
East North Central	4,481,760	124,140	27.7	6,933,397	5,455,121	79	4,963,856	1,108	1,969,540	28
Illinois	1,112,380	29,285	26.3	1,794,693	1,223,066	68	1,293,468	1,163	501,225	28
Indiana	572,980	13,619	23.8	760,046	682,526	90	546,882	954	213,163	28
Michigan	1,022,960	34,981	34.2	1,910,434	1,811,395	95	1,292,168	1,263	618,266	32
Ohio	1,194,900	32,885	27.5	1,793,145	1,298,523	72	1,327,444	1,111	465,701	26
Wisconsin	578,540	13,368	23.1	675,076	439,609	65	503,892	871	171,184	25
West North Central	1,971,240	48,329	24.5	2,432,973	1,645,763	68	1,774,357	900	658,615	27
Iowa	377,600	9,118	24.1	409,915	257,019	63	299,255	793	110,659	27
Kansas	286,060	7,171	25.1	394,009	317,649	81	285,631	999	108,377	28
Minnesota	353,800	7,955	22.5	396,399	219,940	55	284,125	803	112,273	28
Missouri	601,900	15,564	25.9	834,969	630,216	75	610,313	1,014	224,656	27
Nebraska	181,460	4,448	24.5	199,770	122,029	61	151,466	835	48,303	24
North Dakota	80,920	2,012	24.9	102,219	55,918	55	72,037	890	30,181	30
South Dakota	89,500	2,058	23.0	95,690	42,989	45	71,527	799	24,162	25
South Atlantic	4,650,520	134,738	29.0	8,163,373	6,489,961	80	5,814,386	1,250	2,348,987	29
Delaware	67,460	1,595	23.6	105,934	90,871	86	69,700	1,033	36,234	34
Dist. of Columbia	58,240	1,898	32.6	142,413	128,861	90	90,812	1,559	51,600	36
Florida	1,770,900	61,777	34.9	3,869,407	3,094,699	80	2,843,624	1,606	1,025,783	27
Georgia	564,840	15,207	26.9	898,942	677,501	75	642,780	1,138	256,162	28
Maryland	406,800	11,399	28.0	816,292	748,279	92	547,147	1,345	269,145	33
North Carolina	687,640	15,538	22.6	830,608	620,174	75	582,316	847	248,291	30
South Carolina	345,260	8,082	23.4	426,871	331,406	78	297,969	863	128,901	30
Virginia	537,080	14,019	26.1	772,904	552,211	71	531,274	989	241,630	31
West Virginia	212,300	5,219	24.6	299,999	245,955	82	208,760	983	91,239	30

See footnotes at end of table.

Table 58—Continued

Users, services, submitted and allowed charges, and reduction for Medicare physician and supplier services, by area of residence: Calendar year 1988

Area of residence	Number of users 1/	Services		Submitted charges			Allowed charges		Reduction 3/	
		Number in thousands	Per user	Amount in thousands	Assigned in thousands	Percent of charges assigned 2/	Amount in thousands	Per user	Amount in thousands	As percent of submitted charge
East South Central	1,670,340	45,040	27.0	$2,374,036	$1,874,676	79	$1,694,550	$1,014	$679,485	29
Alabama	464,520	12,848	27.7	716,703	585,824	82	505,475	1,088	211,227	29
Kentucky	399,480	10,893	27.3	553,406	489,654	88	408,184	1,022	145,222	26
Mississippi	284,540	7,480	26.3	388,042	260,429	67	266,091	935	121,951	31
Tennessee	521,800	13,818	26.5	715,883	538,767	75	514,799	987	201,083	28
West South Central	2,437,560	71,681	29.4	4,276,450	3,192,904	75	3,031,388	1,244	1,245,061	29
Arkansas	313,360	8,451	27.0	459,136	359,966	78	323,853	1,033	135,283	29
Louisiana	398,980	11,496	28.8	718,439	536,391	75	499,664	1,252	218,774	30
Oklahoma	356,240	9,612	27.0	540,380	340,755	63	381,236	1,070	159,144	29
Texas	1,368,980	42,120	30.8	2,558,493	1,955,790	76	1,826,634	1,334	731,859	29
Mountain	1,125,580	29,199	25.9	1,711,597	1,162,816	68	1,250,551	1,111	461,046	27
Arizona	349,620	9,782	28.0	640,252	443,952	69	473,323	1,354	166,928	26
Colorado	233,700	6,797	29.1	289,516	189,023	65	203,985	873	85,530	30
Idaho	102,580	2,221	21.7	117,358	50,102	43	87,569	854	29,788	25
Montana	85,400	1,828	21.4	101,389	53,572	53	77,096	903	24,293	24
Nevada	82,640	2,354	28.5	198,640	171,773	86	142,403	1,723	56,237	28
New Mexico	120,980	2,956	24.4	179,150	124,348	69	130,163	1,076	48,986	27
Utah	114,780	2,445	21.3	140,716	107,804	77	103,526	902	37,190	26
Wyoming	35,880	812	22.6	44,574	22,239	50	32,482	905	12,091	27
Pacific	3,084,540	91,559	29.7	6,381,065	4,790,006	75	4,597,221	1,490	1,783,840	28
Alaska	15,020	384	25.6	30,455	21,011	69	21,068	1,403	9,386	31
California	2,254,260	69,883	31.0	5,166,382	4,053,819	78	3,696,216	1,640	1,470,165	28
Hawaii	70,880	1,737	24.5	125,181	95,473	76	82,566	1,165	42,614	34
Oregon	290,000	6,744	23.3	358,883	200,363	56	268,995	928	89,887	25
Washington	454,380	12,809	28.2	700,163	419,338	60	528,374	1,163	171,788	25
All other areas	1,070,440	23,920	22.3	1,489,814	961,426	65	1,019,377	952	470,436	32

1/ Detail does not sum to total because beneficiaries may use more than one service.
2/ Ratio of assigned submitted charges to total submitted charges. Includes charges for supplier services.
3/ The difference between the physician/supplier submitted charge and the allowed charge approved by Medicare.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

IX. Summary of supplementary medical insurance benefit for hospital outpatient services

The Medicare supplementary medical insurance (SMI) program helps pay for covered services received as an outpatient from a participating hospital for diagnosis or treatment of an illness or injury. Major hosptial outpatient (HOP) services covered by SMI include: services in an emergency room or outpatient clinic, including ambulatory surgical procedures; laboratory tests billed by the hospital, x-rays and other radiology services billed by the hospital; medical supplies; drugs and biologicals that cannot be self-administered; and blood transfusions.

The implementation (effective October 1, 1983) of the Medicare prospective payment system (PPS) for inpatient care provided to Medicare beneficiaries in participating short-stay hospitals has resulted in large increases in the utilization of hospital outpatient (HOP) services.

In an effort to control the rapid growth in HOP program payments, Congress passed the Omnibus Budget Reconciliation Act (OBRA) of 1986 (Public Law 99-509), which revised the Medicare reimbursement methodology for ambulatory surgery performed in HOP facilities. Instead of paying hospitals on a reasonable-cost basis, OBRA 1986 mandated that the surgical procedures covered in participating ambulatory surgical centers (ASCs) were to be paid a blend of HOP costs and the ASC prospective payment rates. Outpatient surgical procedures not approved for ASCs continue to be paid on the traditional reasonable cost basis.

OBRA 1986 also directed the Secretary of Health and Human Services to develop by April 1989 a PPS for all ambulatory surgery performed in HOP departments. A PPS for all other types of HOP care was to be developed by January 1991. To support the development of these new systems, hospitals are required by OBRA to use the Health Care Financing Administration (HCFA) Common Procedure Coding System (HCPCS) to report claims for surgery and other designated outpatient services. The HCPCS is based on codes found in *Physicians' Current Procedural Terminology, 4th Edition*; it is intended to standardize the reporting of outpatient services by hospitals for development of a PPS and to enable comparisons of services among hospitals and other ambulatory settings.

Medicare's initiation of prospective payment for inpatient hospital services probably explains a significant portion of the accelerated rise in the use of outpatient hospital services. The incentives embedded in PPS encouraged hospitals to reexamine traditional modes of patient care. The ability of hospitals to treat more patients on an outpatient basis was facilitated by recent advances in medical technology; procedures such as cataract extraction, insertion of a pacemaker, and cardiac catheterization can now be performed efficiently and appropriately on an outpatient basis.

Utilization review policies have also influenced the Medicare patient case-mix in hospitals. For example, preadmission review for medical necessity, appropriateness, and quality of care encourage treatment in the most cost-effective setting consistent with the patient's safety. Public and private insurers have also encouraged the use of outpatient care as a means of containing the growth of health expenditures; that is, some insurers pay 100 percent of the charge for procedures that are performed on an outpatient basis, but require a coinsurance payment for those procedures requiring a hospital inpatient stay.

Table 59: Trends in the amounts and relative growth of total Medicare program payments, total hospital payments, hospital inpatient payments, and hospital outpatient payments, by selected calendar years: 1974-88

- From 1974 to 1983, program payments for all Medicare services increased from $11.2 billion to $53.4 billion, an average annual rate of growth (AARC) of 19.0 percent.
- Following the implementation of the prospective payment system (PPS), the escalation of program payments (from $59.1 billion in 1984 to $81.4 billion in 1988) for all Medicare services slowed to an AARC of 8.3 percent.
- For Medicare hospital inpatient services during the pre-PPS period (1974-83), program payments climbed from $7.8 billion to $34.3 billion, an AARC of 17.8 percent. The AARC for hospital inpatient payments decreased to 5.0 percent in the post-PPS years (1984-88).
- Program payments for hospital outpatient (HOP) services increased from $323 million in 1974 to $2.7 billion in 1983, an AARC of 26.4 percent. By 1988, HOP program payments climbed to $6.4 billion.
- Although the AARC in HOP payments increased at a slower rate (17.1 percent) during the post-PPS years 1984-88, the rate of increase was considerably higher than that for all Medicare services (8.3 percent) and hospital inpatient services (5.0 percent).
- The relative rate of growth in program payments (as measured by the index) shows the HOP payments jumped from an index of 100 in 1974 to an index of 1,973 in 1988, or by a factor of more than 19. In contrast, total Medicare payments and total hospital payments increased by a factor of only 7 (Figure 18).

- HOP program payments accounted for 2.9 percent of all Medicare program payments in 1974; the proportion had increased to 7.8 percent by 1988.

Table 60: Supplementary medical insurance (SMI) enrollees, hospital outpatient (HOP) charges, program payments, and average annual rate of change, by type of entitlement and year service incurred: Selected calendar years 1974-88

- The total number of SMI enrollees increased from 23.2 million in 1974 to 31.6 million in 1988, an average annual rate of change (AARC) of 2.2 percent.
- Medicare HOP program payments rose from $323 million in 1974 to $6.4 billion in 1988, an AARC of 23.7 percent. (During the same period, total Medicare program payments increased by an AARC of 8.3 percent).
- The average HOP program payment per enrollee increased from $14 per enrollee in 1974 to $202 in 1988, an AARC of 21.0 percent. From 1974-83, however, the AARC was 23.3 percent.
- In 1988, the average HOP payment per enrollee was $177 for the aged, compared to $449 for the disabled. This reflects the higher proportion of disabled ESRD enrollees who use hospital outpatient renal dialysis services.

Table 61: Covered charges, percent distribution, and average charge per enrollee for hospital outpatient services under Medicare, by type of service, sex, race, and type of supplementary medical insurance entitlement: Calendar year 1988

- Nearly half of all Medicare HOP charges ($11.8 billion) were for three services—radiology ($2.8 billion or 24.0 percent), renal dialysis ($1.5 billion or 12.4 percent), and laboratory ($1.6 billion or 13.1 percent) (Figure 19).
- HOP charges for operating room services ($1.4 billion) accounted for about 12 percent of all HOP charges for Medicare beneficiaries, reflecting the increased significance of surgical procedures performed in an outpatient setting.
- By race and type of enrollment, substantial differences exist in the use of HOP services as measured by the average charge per enrollee. The total charge per enrollee for persons of races other than white ($536) was 51 percent higher than that for persons of the white race ($355). The total charge per disabled enrollee ($720) was 112 percent higher than that for the aged ($340). For the most part, these differences in the average charge per enrollee reflect the use of renal dialysis services by ESRD enrollees, who constitute a larger proportion of the disabled population than do the ESRD enrollees in the aged population.
- Renal dialysis accounted for about 44 percent of all HOP charges among the disabled, but only 6 percent among the aged. Similarly, charges for renal dialysis services represented 34 percent of all charges for persons of races other than white, compared with only 9 percent of white persons.

Table 62: Hospital outpatient clinic and emergency room visits and charges under Medicare, by sex, race, and type of supplementary medical insurance entitlement: Calendar year 1988

- In 1988, Medicare beneficiaries made 7.0 million visits to HOP clinics and 9.5 million visits to HOP emergency rooms, an average of 221 and 299 visits per 1,000 enrollees, respectively.
- Although data for 1983 are not shown in the table, the rate of use of clinic services by Medicare beneficiaries increased about 8 percent from 1983 (204 visits per 1,000 enrollees) to 1988 (221 visits per 1,000 enrollees).
- The rate of emergency room visits, however, showed an increase of about 45 percent from 1983 (206 visits per 1,000 enrollees) to 1988 (299 visits per 1,000 enrollees).
- The average HOP charge per visit for clinic services was $46, and the average charge per visit for emergency room services was $51.
- Substantial differences exist in the rate of use (visits per 1,000 enrollees) of clinic and emergency room services by race and type of entitlement.
- Persons of races other than white used clinic and emergency room services 4.0 times and 1.4 times more, respectively, than did white persons. This suggests that persons of races other than white may be using HOP settings for primary care services to a greater extent than white persons. Disabled beneficiaries used clinic and emergency room services 2.6 times and 2.2 times more, respectively, than did aged beneficiaries.

Table 63: Type of supplementary medical insurance (SMI) entitlement and program payments for hospital outpatient services received by Medicare beneficiaries, by area of residence: Calendar year 1988

- In 1988, HOP program payments in the United States were $6.4 billion; by region, the HOP program payments were highest in the South Region ($2.1 billion) and lowest in the West ($1.2 billion).
- By State, California had the highest program payments ($671 million), and Alaska ($6 million) had the lowest. The average program payment per enrollee ranged from a low of $125 in Minnesota to a high of $320 in the District of Columbia (Figure 20).
- End stage renal disease (ESRD) enrollees (136,000) represented only about 0.4 percent of all Medicare SMI enrollees (31.6 million), but they accounted for more than 19 percent ($1.2 billion) of all Medicare HOP program payments ($6.4 billion).
- The average HOP program payment per ESRD enrollee ($8,867) was nearly 44 times greater than the average HOP payment per enrollee ($202) for all Medicare enrollees.
- By region, the South had the lowest average program payment per enrollee ($193) for all types of enrollees, about 5 percent lower than the national average ($202). The West and North Central Regions displayed the highest average program payment per enrollee ($211), about 4 percent higher than the national average.

Table 64: Number of hospital outpatient bills, covered charges, and program payments under Medicare, by the 10 leading principal diagnoses: Calendar year 1988

- Among all Medicare beneficiaries using HOP services, the 10 leading (most frequently reported) principal diagnoses accounted for 29 percent (12.7 million) of all HOP billings (44.0 million) and 41 percent ($2.6 billion) of all HOP program payments ($6.4 billion).
- For the 10 leading principal diagnoses, the average program payment per bill ($207) was 43 percent higher than the average payment for all diagnoses ($145).
- Diabetes was the most frequently reported principal diagnosis, comprising 4 percent (1.9 million) of all billings and 1 percent ($68.0 million) of all program payment for HOP services. The average program payment per bill for beneficiaries with diabetes was $36, or about one-fourth that for all diagnoses ($145).
- Chronic renal failure (CRF) was the most costly leading principal diagnosis, accounting for 17 percent ($1.1 billion) of all HOP program payments. The average program payment per bill for CRF was $829, or almost six times higher than the average HOP payment for all diagnoses.

Table 65: Number of hospital outpatient procedures, covered charges, and program payments for Medicare beneficiaries, by the 20 leading principal HCPCS surgical procedures: Calendar year 1988

NOTE: HCPCS denotes surgical codes derived from the HCFA Common Procedure Coding System.

- HOP program payments for all surgical procedures amounted to $1.8 billion, an average of $513 per procedure.
- The 20 leading (most frequently reported) surgical procedures accounted for about 9 percent (306,600) of all HOP surgical procedures (3.4 million) and 10 percent ($181.3 million) of all HOP program payments for surgical procedures ($1.8 billion).
- The most frequent HOP surgical procedure was extracapsular cataract removal with insertion of intraocular lens prosthesis (HCPCS code 66984), which accounted for nearly 4 percent (133,380) of all procedures and 8 percent ($135.9 million) of all HOP program payments for surgical procedures.
- The average HOP program payment for the most frequent surgical procedure (HCPCS code 66984) was $1,019 per procedure, or about two times higher than the average for all HOP surgical procedures.
- Among the 20 leading surgical procedures, the average program payment per procedure ranged from $52 for simple repair of superficial wounds (HCPCS code 12001) to $1,022 for intracapsular cataract extraction with insertion of intraocular lens prosthesis.

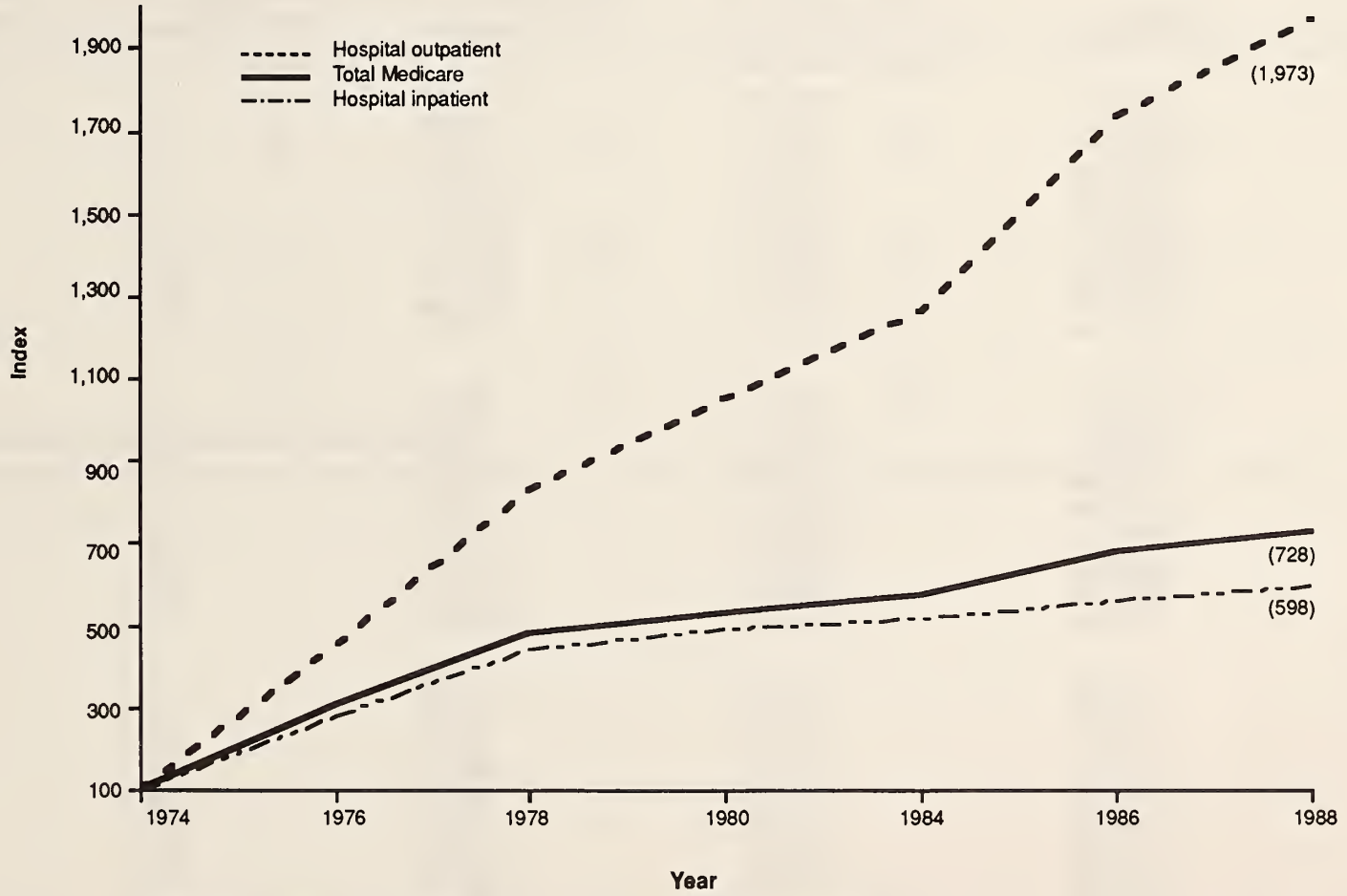
Table 59

Trends in the amounts and relative index of total Medicare program payments, total hospital payments, hospital inpatient payments, and hospital outpatient payments, by selected calendar years: 1974-88

Year	Amount of program payments in millions and relative index								Hospital outpatient payments as a percent of		
	Total Medicare services		Total hospital services		Hospital inpatient services		Hospital outpatient services				
	Amount	Index	Amount	Index	Amount	Index	Amount	Index	Total Medicare payments	Total hospital payments	Hospital inpatient payments
1974	$11,179	100	$8,160	100	$7,837	100	$323	100	2.9	4.0	4.1
1980	33,613	301	23,541	288	22,099	282	1,442	446	4.3	6.1	6.5
1983	53,438	478	36,999	453	34,338	438	2,661	824	5.0	7.2	7.7
1984	59,146	529	41,887	513	38,500	491	3,387	1049	5.7	8.1	8.8
1985	63,694	570	44,282	543	40,200	513	4,082	1264	6.4	9.2	10.2
1987	75,816	678	49,668	609	44,068	562	5,600	1734	7.4	11.3	12.7
1988	81,403	728	53,251	653	46,879	598	6,372	1973	7.8	12.0	13.6
	Average annual rate of change										
1974-88	15.2	—	14.3	—	13.6	—	23.7	—	—	—	—
1974-83	19.0	—	18.3	—	17.8	—	26.4	—	—	—	—
1984-88	8.3	—	6.2	—	5.0	—	17.1	—	—	—	—

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Figure 18
Relative growth in total Medicare payments, hospital inpatient payments, and hospital outpatient payments: Selected years 1974-88



NOTES: Semi-logarithmic scale, 1974=100. The number in parantheses represent 1988 value of index

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 60

Supplementary medical insurance (SMI) enrollees, hospital outpatient (HOP) charges, program payments, and average annual rate of change, by type of entitlement and year service incurred: Selected calendar years 1974-88

Type of entitlement and year service incurred	Number of SMI enrollees	HOP covered charges in thousands	HOP program payments		
			Amount in thousands	Per enrollee	As percent of charges
All SMI enrollees					
1974 1/	23,166,570	$535,296	$323,383	$14	60.4
1976	24,614,402	974,708	630,323	26	64.7
1978	26,074,085	1,384,067	923,658	35	66.7
1980	27,399,658	2,076,396	1,441,986	52	69.4
1982	28,412,282	3,164,530	2,203,260	78	69.6
1983	28,974,535	3,813,118	2,661,394	92	69.8
1984	29,415,397	5,129,210	3,387,146	115	66.0
1985	29,988,763	6,480,777	4,082,303	136	63.0
1986	30,589,728	8,115,976	4,881,605	160	60.1
1987	31,169,960	9,794,832	5,690,786	183	58.1
1988	31,617,082	11,833,919	6,371,704	202	53.8
Aged enrollees					
1974 1/	21,421,545	394,680	220,742	10	55.9
1976	22,445,911	704,569	432,971	19	61.5
1978	23,530,893	1,005,467	648,249	28	64.5
1980	24,680,432	1,517,183	1,030,896	42	69.9
1982	25,706,792	2,402,462	1,645,064	64	68.5
1983	26,292,124	2,995,784	2,066,207	79	69.0
1984	26,764,150	4,122,859	2,679,571	100	65.0
1985	27,310,894	5,210,762	3,211,744	118	61.6
1986	27,862,737	6,529,273	3,809,992	137	58.4
1987	28,382,203	8,021,167	4,522,841	159	56.4
1988	28,780,154	9,790,273	5,098,546	177	52.1
Disabled enrollees					
1974 1/	1,745,019	140,617	102,641	57	70.8
1976	2,168,467	270,139	197,352	91	73.1
1978	2,543,162	378,600	275,409	108	72.7
1980	2,719,226	559,213	411,090	152	73.5
1982	2,705,490	762,068	558,195	206	73.2
1983	2,682,411	817,335	595,187	222	72.8
1984	2,651,247	1,006,351	707,575	267	70.3
1985	2,677,869	1,270,015	870,560	325	68.5
1986	2,726,991	1,586,703	1,071,613	393	67.5
1987	2,787,757	1,773,664	1,167,945	417	65.8
1988	2,836,928	2,043,646	1,273,158	449	62.3

See footnote at end of table.

Table 60—Continued
Supplementary medical insurance (SMI) enrollees, hospital outpatient (HOP) charges, program payments, and average annual rate of change, by type of entitlement and year service incurred: Selected calendar years 1974-88

Type of entitlement and year service incurred	Number of SMI enrollees	HOP covered charges in thousands	HOP program payments		
			Amount in thousands	Per enrollee	As percent of charges
	Average annual rate of change				
All SMI enrollees					
1974-88	2.2	24.7	23.7	21.0	-0.8
1974-83	2.5	24.4	26.4	23.3	1.6
1984-88	1.8	23.2	17.1	15.1	-5.0
Aged enrollees					
1974-88	2.1	25.8	25.1	22.5	-0.5
1974-83	2.3	25.3	28.2	25.4	2.4
1984-88	1.8	24.1	17.4	15.3	-5.4
Disabled enrollees					
1974-88	3.5	21.1	19.7	15.9	-0.9
1974-83	4.9	21.6	21.6	16.3	0.3
1984-88	1.7	19.4	15.8	13.9	-3.0

1/ 1974 is the first full year of coverage for disabled beneficiaries under Medicare.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 61

Covered charges, percent distribution, and average charge per enrollee for hospital outpatient services under Medicare, by type of service, sex, race, and type of supplementary medical insurance (SMI) entitlement: Calendar year 1988

Sex, race, and type of SMI entitlement	Total	Type of service									
		Clinic	Emergency room	Laboratory	Radiology	Pharmacy	Physical therapy	Ambulance	Operating room 1/	Renal dialysis	Other 2/
		Covered charges in thousands									
Total	$11,833,919	$323,619	$485,760	$1,555,899	$2,844,146	$621,808	$315,711	$129,513	$1,376,467	$1,472,529	$2,704,304
Sex											
Male	5,151,968	127,154	210,716	649,210	1,243,116	273,858	107,480	60,345	567,035	736,112	1,175,133
Female	6,681,950	196,465	275,044	906,688	1,601,030	347,949	208,230	69,167	809,432	736,416	1,529,171
Race											
White	9,725,368	197,602	395,500	1,310,451	2,484,362	538,356	280,365	113,108	1,220,826	827,550	2,353,494
Other	1,759,632	117,533	77,645	201,790	274,022	67,063	27,164	12,833	115,640	591,156	274,471
Unknown	348,918	8,483	12,614	43,656	85,762	16,388	8,181	3,571	40,000	53,822	76,338
Type of entitlement											
Aged	9,790,273	252,800	399,749	1,329,044	2,599,742	546,741	281,382	116,878	1,290,151	582,056	2,387,713
Disabled	2,043,645	70,819	86,011	226,854	244,403	75,066	34,328	12,634	86,316	890,473	316,590
		Percent distribution									
Total	100.0	2.7	4.1	13.1	24.0	5.3	2.7	1.1	11.6	12.4	22.9
Sex											
Male	100.0	2.5	4.1	12.6	24.1	5.3	2.1	1.2	11.0	14.3	22.8
Female	100.0	2.9	4.1	13.6	24.0	5.2	3.1	1.0	12.1	11.0	22.9
Race											
White	100.0	2.0	4.1	13.5	25.5	5.5	2.9	1.2	12.6	8.5	24.2
Other	100.0	6.7	4.4	11.5	15.6	3.8	1.5	0.7	6.6	33.6	15.6
Unknown	100.0	2.4	3.6	12.5	24.6	4.7	2.3	1.0	11.5	15.4	21.9
Type of entitlement											
Aged	100.0	2.6	4.1	13.6	26.6	5.6	2.9	1.2	13.2	5.9	24.4
Disabled	100.0	3.5	4.2	11.1	12.0	3.7	1.7	0.6	4.2	43.6	15.5

See footnotes at end of table.

Table 61—Continued

Covered charges, percent distribution, and average charge per enrollee for hospital outpatient services under Medicare, by type of service, sex, race, and type of supplementary medical insurance (SMI) entitlement: Calendar year 1988

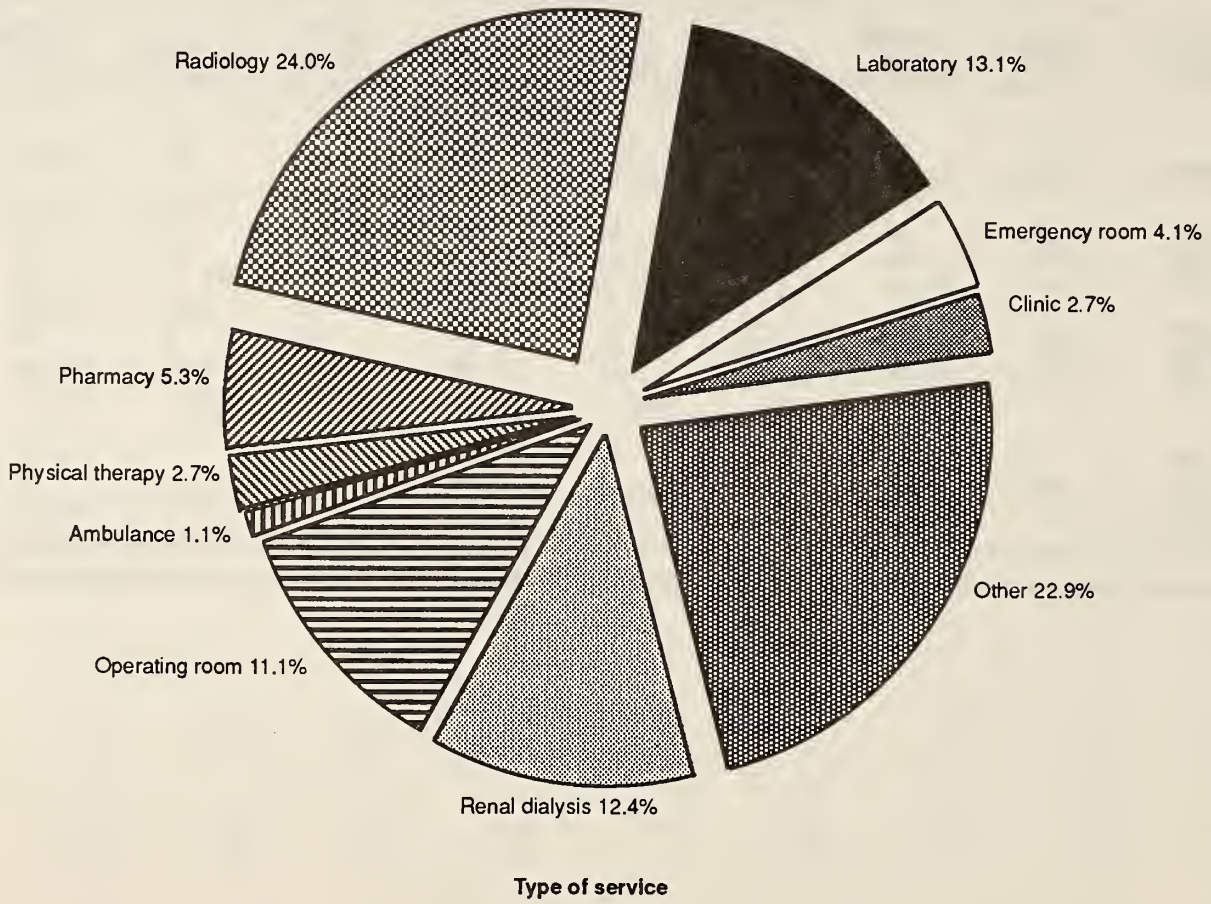
Sex, race, and type of SMI entitlement	Total	Type of service									
		Clinic	Emergency room	Laboratory	Radiology	Pharmacy	Physical therapy	Ambulance	Operating room 1/	Renal dialysis	Other 2/
		Charges per enrollee									
Total	$374	$10	$15	$49	$90	$20	$10	$4	$44	$47	$86
Sex											
Male	391	10	16	49	94	21	8	5	43	56	89
Female	362	11	15	49	87	19	11	4	44	40	83
Race											
White	355	7	14	48	91	20	10	4	45	30	86
Other	536	36	24	62	84	20	8	4	35	180	84
Unknown	370	9	13	46	91	17	9	4	42	57	81
Type of entitlement											
Aged	340	9	14	46	90	19	10	4	45	20	83
Disabled	720	25	30	80	86	26	12	4	30	314	112

1/ Includes recovery room and labor room.

2/ Includes charges for computerized axial tomography, durable medical equipment, blood, blood administration, medical and surgical supplies, speech pathology, occupational therapy, inhalation therapy, etc.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Figure 19
Percent distribution of hospital outpatient charges under Medicare, by type of service: Calendar year 1988



NOTE: Total charges are $11.8 billion.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support system; data development by the Office of Research and Demonstrations.

Table 62
Hospital outpatient clinic and emergency room visits and charges under Medicare, by sex, race, and type of supplementary medical insurance (SMI) entitlement: Calendar year 1988

Sex, race, and type of entitlement	Clinic				Emergency room			
	Visits		Charges 1/		Visits		Charges	
	Number in thousands	Per 1,000 enrollees	Amount in thousands	Per visit	Number in thousands	Per 1,000 enrollees	Amount in thousands	Per visit
Total	6,979	221	$323,619	$46	9,467	299	$485,760	$51
Sex								
Male	2,783	211	127,154	46	4,072	309	210,716	52
Female	4,195	228	196,465	47	5,395	293	275,044	51
Race								
White	4,607	168	197,602	43	7,921	289	395,500	50
Other	2,183	666	117,533	54	1,297	395	77,645	60
Unknown	188	199	8,483	45	249	264	12,614	51
Type of SMI entitlement								
Aged	5,565	193	252,800	45	7,783	270	399,749	51
Disabled	1,414	498	70,819	50	1,684	594	86,011	51

1/ Represents only the routine administrative charges.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 63

Type of supplementary medical insurance (SMI) entitlement and program payments for hospital outpatient services received by Medicare beneficiaries, by area of residence: Calendar year 1988

Area of residence	Type of SMI entitlement 1/				Program payments				Average program payment			
	Total	Aged 2/	Disabled 3/	ESRD 4/	Total	Aged 2/	Disabled 3/	ESRD 4/	Total	Aged 2/	Disabled 3/	ESRD 4/
	Number of enrollees in thousands				Amount in millions				Amount per enrollee			
All areas	31,617	28,734	2,747	136	$6,372	$4,666	$502	$1,203	$202	$162	$183	$8,867
United States 5/	31,296	28,467	2,696	133	6,337	4,651	500	1,186	202	163	185	8,852
Northeast	7,034	6,458	548	28	1,419	1,035	118	267	202	160	215	9,514
North Central	7,962	7,271	661	30	1,678	1,296	123	259	211	178	186	8,614
South	10,668	9,583	1,034	51	2,057	1,470	163	424	193	153	158	8,387
West	5,612	5,137	451	24	1,183	851	96	235	211	166	213	9,639
New England												
Connecticut	440	410	28	2	94	70	9	15	214	171	321	8,430
Maine	173	157	16	(6/)	35	28	3	3	202	178	188	7,681
Massachusetts	809	746	60	3	192	155	16	21	237	208	267	7,600
New Hampshire	127	118	9	(6/)	26	21	2	3	205	178	222	7,283
Rhode Island	149	136	12	1	29	22	2	5	195	162	167	9,476
Vermont	70	64	6	(6/)	14	10	1	2	200	156	167	12,147
Middle Atlantic												
New Jersey	1,037	955	77	5	173	116	11	46	167	121	143	9,373
New York	2,384	2,176	198	10	466	310	48	108	195	142	242	10,722
Pennsylvania	1,845	1,697	141	7	390	302	24	64	211	178	170	9,083
East North Central												
Illinois	1,451	1,332	113	6	294	216	19	60	203	162	168	9,256
Indiana	716	647	66	3	144	108	12	24	201	167	182	8,681
Michigan	1,160	1,040	115	5	357	283	29	46	308	272	252	9,652
Ohio	1,447	1,307	134	6	295	223	22	49	204	171	164	8,748
Wisconsin	679	622	55	2	129	103	11	15	190	166	200	6,788
West North Central												
Iowa	439	409	29	1	84	67	5	11	191	164	172	8,325
Kansas	346	323	22	1	76	63	4	8	220	195	182	7,450
Minnesota	558	520	36	2	70	51	5	14	125	98	139	7,358
Missouri	741	673	65	3	160	125	13	22	216	186	200	8,126
Nebraska	227	213	13	1	40	31	2	7	176	146	154	9,895
North Dakota	94	88	6	(6/)	16	14	1	1	170	159	167	2,849
South Dakota	104	97	7	(6/)	14	11	1	3	135	113	143	8,098
South Atlantic												
Delaware	81	74	7	(6/)	15	12	1	2	185	162	143	3,680
District of Columbia	75	66	6	3	24	15	2	8	320	227	333	9,725
Florida	2,155	2,006	141	8	470	380	29	61	218	189	206	7,956
Georgia	679	591	84	4	133	88	13	31	196	149	155	7,682
Maryland	496	454	39	3	121	85	10	26	244	187	256	10,065
North Carolina	820	727	89	4	148	94	12	42	180	129	135	10,700
South Carolina	404	351	51	2	90	58	9	23	223	165	176	9,344
Virginia	661	591	66	4	121	80	10	32	183	135	152	8,626
West Virginia	292	252	39	1	43	35	4	5	147	139	103	4,809

See footnotes at end of table.

Table 63—Continued

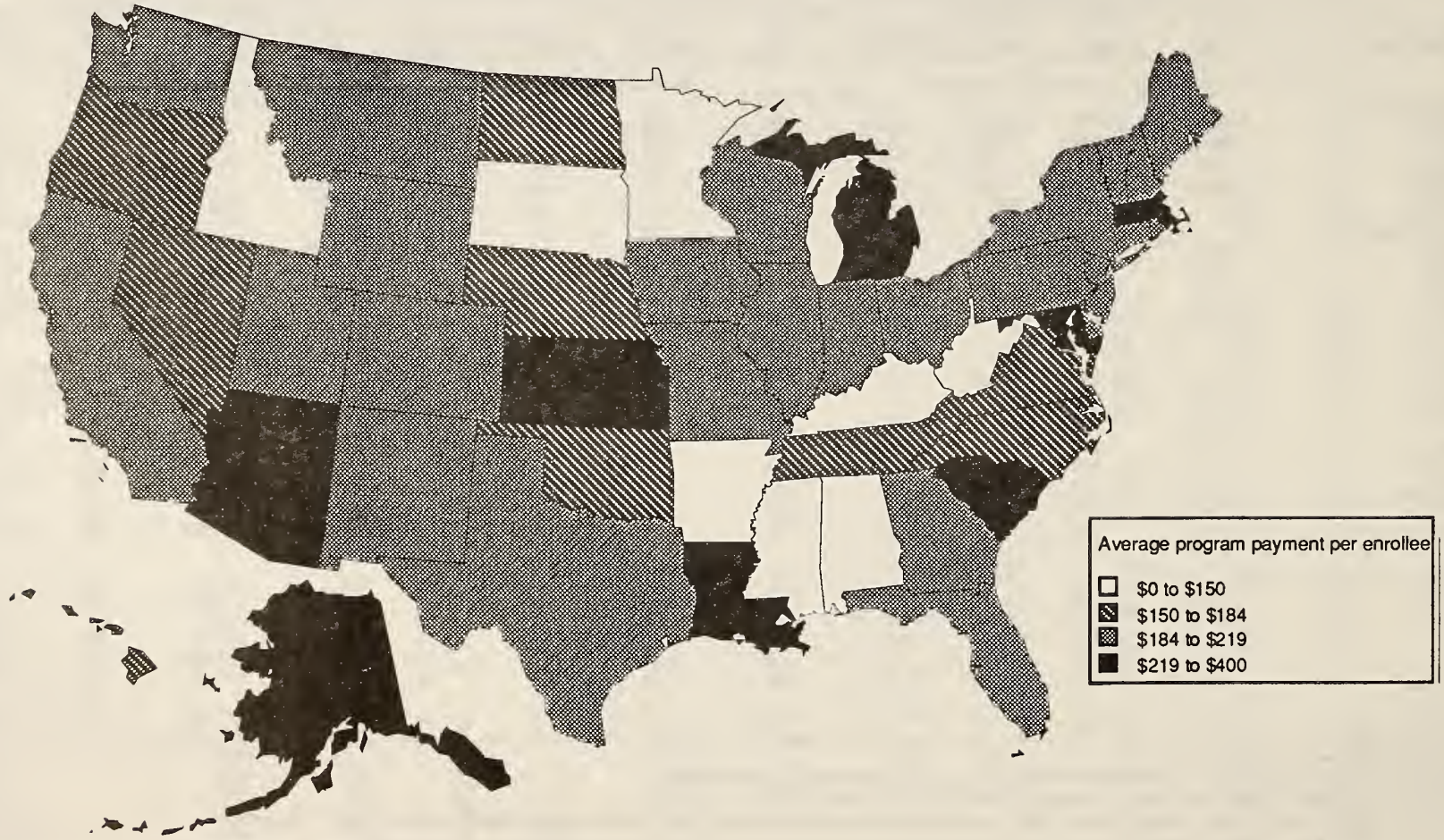
Type of supplementary medical insurance (SMI) entitlement and program payments for hospital outpatient services received by Medicare beneficiaries, by area of residence: Calendar year 1988

Area of residence	Type of SMI entitlement 1/				Program payments				Average program payment			
	Total	Aged 2/	Disabled 3/	ESRD 4/	Total	Aged 2/	Disabled 3/	ESRD 4/	Total	Aged 2/	Disabled 3/	ESRD 4/
	Number of enrollees in thousands				Amount in millions				Amount per enrollee			
East South Central												
Alabama	545	478	64	3	$75	$48	$8	$19	$138	$100	$125	$6,156
Kentucky	503	437	64	2	75	57	8	10	149	130	125	5,797
Mississippi	347	299	46	2	51	32	6	14	147	107	130	7,764
Tennessee	648	572	73	3	113	74	11	28	174	129	151	10,435
West South Central												
Arkansas	369	327	41	1	50	36	4	10	136	110	98	7,463
Louisiana	491	428	61	2	123	82	11	30	251	192	180	10,398
Oklahoma	423	389	33	1	65	50	5	11	154	129	152	7,778
Texas	1,680	1,541	130	9	340	244	21	75	202	158	162	8,034
Mountain												
Arizona	447	411	34	2	108	83	9	17	242	202	265	9,719
Colorado	322	295	26	1	66	50	6	10	205	169	231	7,717
Idaho	122	113	9	(6/)	26	21	1	4	213	186	111	11,539
Montana	109	100	9	(6/)	21	16	2	2	193	160	222	7,074
Nevada	117	106	10	1	18	13	2	3	154	123	200	6,576
New Mexico	161	144	16	1	32	23	2	7	199	160	125	9,165
Utah	144	133	10	1	31	27	2	2	215	203	200	3,554
Wyoming	47	44	3	(6/)	10	9	(7/)	1	213	205	131	9,647
Pacific												
Alaska	20	18	2	(6/)	6	4	1	1	300	222	500	11,237
California	3,057	2,791	251	15	671	466	57	148	219	167	227	9,958
Hawaii	112	104	7	1	20	9	1	10	179	87	143	13,888
Oregon	391	361	29	1	65	50	5	10	166	139	172	9,128
Washington	564	518	44	2	108	80	8	19	191	154	182	10,110
Outlying areas 8/	275	226	47	2	34	15	2	17	124	66	43	7,283

1/ Based on SMI enrollment as of July 1, 1988.
2/ Aged beneficiaries with end stage renal disease excluded from the data; includes Medicare status code 10 only.
3/ Disabled beneficiaries with end stage renal disease excluded from the data; includes Medicare status code 20 only.
4/ ESRD denotes end stage renal disease; these data include ESRD enrollees entitled to Medicare because of age, disability, or ESRD (Medicare status codes 11, 21, and 31).
5/ Consists of 50 States and the District of Columbia.
6/ Less than 500 enrollees. Actual enrollment for footnoted States: Maine,430; New Hampshire,371; Vermont,184; North Dakota,252; South Dakota,336; Delaware,409; Idaho,360; Montana,323; Wyoming,139; Alaska,114.
7/ Less than $500,000.
8/ Consists of Puerto Rico, Virgin Islands, Guam, and other areas.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Figure 20
Average program payments per enrollee for hospital outpatient services under Medicare: Calendar year 1988



SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 64
Number of hospital outpatient bills, covered charges, and program payments under Medicare, by the 10 leading principal diagnoses: Calendar year 1988

Principal diagnosis	ICD-9-CM Code 1/	Number of bills	Covered charges in thousands	Program payments in thousands	Average charge per bill	Average program payment per bill
Total, all diagnoses	—	44,047,340	$11,833,919	$6,371,704	$269	$145
10 leading principal diagnoses 2/						
Total	—	12,706,060	4,517,904	2,626,632	356	207
Diabetes mellitus	250	1,891,540	135,559	68,009	72	36
Special investigations and examinations	V72	1,725,140	161,254	82,186	93	48
Essential hypertension	401	1,578,460	153,091	75,235	96	47
Symptoms involving respiratory system and other chest symptoms	786	1,395,300	325,789	156,196	233	112
Chronic renal failure	585	1,332,980	1,457,162	1,104,740	1,093	829
General symptoms	780	1,105,580	240,441	114,583	217	104
Cataract	366	1,110,600	1,519,072	768,127	1,368	692
Other symptoms involving abdomen and pelvis	789	943,420	233,943	112,100	248	119
Other disorders of urethra and urinary tract	599	905,560	125,234	58,272	138	64
Other forms of chronic ischemic heart disease	414	704,480	166,359	87,185	236	124
All other diagnoses						
Total	—	31,345,280	7,316,015	3,745,072	233	119

1/ Principal diagnosis from the *International Classification of Diseases, 9th Revision, Clinical Modification*, Volume 1.
2/ Based on frequency of occurrence.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 65

Number of hospital outpatient procedures, covered charges, and program payments for Medicare beneficiaries, by the 20 leading principal HCPCS 1/ surgical procedures: Calendar year 1988

Principal HCPCS procedure	HCPCS code	Number of procedures	Covered charges in thousands	Program payments in thousands	Average charge per procedure	Average program payment per procedure
Total, all procedures	—	3,423,180	$3,432,020	$1,754,526	$1,003	$513
20 leading principal HCPCS surgical procedures 2/						
Total	—	306,600	348,263	181,297	1,136	591
Extracapsular cataract removal with insertion of intraocular lens prosthesis (one stage procedure), manual or phacoemulsification technique	66984	133,380	260,131	135,869	1,950	1,019
Discission of secondary membraneous cataract (after cataract) and/or anterior hyaloid; laser surgery (one or more stages)	66821	41,940	13,716	6,827	327	163
Destruction of extensive or progressive retinopathy (e.g. diabetic retinopathy), one or more sessions; photocoagulation (laser or xenon arc)	67228	15,960	3,948	2,023	247	127
Trabeculoplasty by laser surgery, one or more sessions (defined treatment series)	65855	15,520	4,236	2,128	273	137
Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/ or extremities (including hands and feet); 2.5 cm or less	12001	12,760	1,644	664	129	52
Neurolysis and/or transposition; median nerve at carpal tunnel	64721	9,820	8,547	4,435	870	452
Intracapsular cataract extraction with insertion of intraocular lens prosthesis (one stage procedure)	66983	8,920	17,183	9,121	1,926	1,022
Destruction of localized lesion of retina (e.g. maculopathy, choroidopathy, small tumors), one or more sessions; photocoagulation (laser or xenon arc)	67210	8,480	2,061	1,081	243	127
Simple repair of superficial wounds of scalp, neck, axillae, external genitalia, trunk and/ or extremities (including hands and feet); 2.6 cm to 7.5 cm	12002	8,120	1,140	474	140	58
Colonoscopy, fiberoptic, beyond splenic flexure; for removal of polypoid lesion(s)	45385	7,700	4,236	2,207	550	287

See footnotes at end of table.

Table 65—Continued

Number of hospital outpatient procedures, covered charges, and program payments for Medicare beneficiaries, by the 20 leading principal HCPCS 1/ surgical procedures: Calendar year 1988

Principal HCPCS procedure	HCPCS code	Number of procedures	Covered charges in thousands	Program payments in thousands	Average charge per procedure	Average program payment per procedure
Iridotomy by photocoagulation (one or more sessions), (e.g. for glaucoma)	66761	7,200	$2,059	$1,038	$286	$144
Repair inguinal hernia, age 5 or over	49505	5,500	7,146	3,967	1,299	721
Excision of cyst, fibroadenoma, or other benign or malignant tumor aberrant breast tissue, duct lesion or nipple lesion (except 19140), male or female, one or more lesions	19120	5,140	5,276	2,641	1,027	514
Discission of lens capsule; laser surgery (one or more stages)	66802	4,960	1,582	773	318	156
Simple repair of superficial wounds of face, ears, eyelids, nose, lips and/or mucous membranes; 2.5 cm or less	12011	4,440	793	357	179	80
Cystourethroscopy, with calibration and/or dilation of urethral stricture or stenosis, with or without meatotomy and injection procedure for cystography, male or female	52281	4,100	2,225	1,112	543	271
Insertion of intraocular lens subsequent to cataract removal (separate procedure)	66985	3,600	6,762	3,644	1,878	1,012
Dilation and curettage, diagnostic and/or therapeutic (nonobstetrical)	58120	3,340	2,893	1,565	866	469
Excision, other benign lesion (unless listed elsewhere), face, ears, eyelids, nose, lips, mucous membrane; lesion diameter 0.6 to 1.0 cm	11440	2,960	988	479	334	162
Discission of secondary membraneous cataract (after cataract) with corneoscleral section, with or without iridectomy (iridocapsulotomy, iridocapsulectomy)	66830	2,760	1,697	892	615	323
All other prodedures						
Total	—	3,116,580	3,083,755	1,573,229	989	505

1/ HCPCS denotes Health Care Financing Administration Common Procedure Coding System.
2/ Leading surgical HCPCS codes were selected from among the code range 10000-69979 (Surgery Procedures). Certain procedures within this range were excluded based on the following: (a) the procedure performed was truly a diagnostic procedure (e.g., proctosigmoidoscopy—code 54300); (b) the procedure performed was a combined diagnostic and incisional/excisional/discissional procedure, although was truly diagnostic—and not therapeutic—in nature (e.g., esophagoscopy with excisional biopsy of polyp—code 43020); (c) the procedure performed was minimally incisional, invasive, but primarily to faciliate a medical (e.g., chemotherapy—code 36640, transfusion—code 36620), diagnostic (e.g., routine venipuncture—code 36145) or anesthetic (e.g., local infiltration/ injection—code 62274) service. Leading procedures were based on the frequency of occurrence.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

X. Summary of end stage renal disease services

End stage renal disease (ESRD) is that stage of kidney impairment which is irreversible, cannot be controlled by conservative management alone, and requires dialysis or kidney transplantation to maintain life. Section 2991 of Public Law 92-603 (Social Security Amendments of 1972) extended Medicare coverage to persons with ESRD. The Social security Amendments of 1978 made changes in the rules governing entitlement to Medicare designed to encourage self-dialysis and transplantation and to eliminate a number of inequities and difficulties that existed under previous law. Persons eligible for Medicare because of ESRD are entitled to all the Medicare benefits available under the Medicare program, not just those directly related to ESRD such as renal dialysis and transplantation.

To be eligible for Medicare ESRD benefits, an application for Medicare must be filed and a physician must certify that the individual requires chronic dialysis or a kidney transplant to maintain life. In addition to having chronic renal failure, the person must either be entitled to a monthly insurance benefit under Title II of the Social Security Act (or an annuity under the Railroad Retirement Act); be fully or currently insured under Social Security (railroad work may count); or be the spouse or dependent child of a person who meets one of the previous requirements. There is no minimum age limitation.

Provided all eligibility requirements are met, a person's Medicare entitlement due to ESRD begins with the earliest of the following four occurrences:

- The third month after the month in which a course of dialysis is initiated. For example, if a course was initiated any time during the month of January, the date of entitlement would be April 1.
- The month a course of maintenance dialysis begins if the individual participates in a self-dialysis training program in an approved facility and is expected to complete the training successfully and self-dialyze thereafter (effective October 1, 1978).
- The month of transplant.
- The month an individual is admitted to an approved hospital for procedures preliminary to a transplant, if the transplant takes place within the following 2 months. If the transplant is delayed more than 2 months, Medicare coverage will begin the second month prior to the month the actual transplant takes place, or if earlier, the first day of the third month after maintenance dialysis began (effective October 1, 1978).

A person's entitlement due to ESRD terminates with the earliest of the following events:

- The day of death.
- The last day of the 12th month after a person no longer requires maintenance dialysis treatments.
- The last day of the 36th month after the month in which the individual receives a kidney transplant. If within 36 months after transplantation the person requires another transplant or returns to dialysis, there is no interruption in entitlement (effective October 1, 1978).

A person whose ESRD entitlement terminates may remain entitled due to disability or age greater than 65. A person whose ESRD entitlement was ended will be re-entitled as of the month his or her new course of dialysis begins with no second qualifying period.
A number of important trends about ESRD treatment and the Medicare ESRD program are shown in the data presented in the following tables and are summarized briefly in the paragraphs below.

The number of persons diagnosed and treated for ESRD has increased rapidly since the inception of the Medicare ESRD program. Between 1978 and 1988 the number of ESRD program enrollees has grown at an average annual rate of change (AARC) of 11.8 percent. The rates of increase are highest among the elderly (ages 65 and over); among females and non-whites; and among persons whose primary cause of renal failure is diabetes and hypertension. It is not clear why the number of ESRD patients is growing so much faster than is the U.S. population.

The ESRD program has a high cost, both in aggregate and per person treated. The cost to Medicare for providing medical care to ESRD patients was approximately $3.7 billion in 1988.

The average expenditure per ESRD user ($23,270) was more than 7 times higher than that for all persons served by Medicare ($3,254).

Not only is the cost of the Medicare ESRD program high, it is growing. Between 1985 and 1988, ESRD program costs grew at an AARC of 11.8 percent. However, expenditures per ESRD patient grew at an AARC of 2.9 percent. Expenditures per enrollee for all Medicare participants grew at an AARC of 6.3 percent. Total ESRD program costs grew mainly due to an increase in the number of ESRD patients, with price inflation held to low levels. Medicare pays for dialysis and physician supervision of dialysis patients using fixed amount or capitated payment rates rather than fee-for-service rates. This has allowed Medicare to minimize price inflation for these costly services. Medicare costs for all beneficiaries, however, grew mainly due to inflation, with only modest increases in the population enrolled.

The combined effect of more transplantations and a higher graft survival rate is shifting the ESRD population from one primarily dependent on dialysis to one increasingly composed of patients with functioning grafts. The proportion of ESRD enrollees with a functioning graft grew from 11.2 percent in 1978 to 22.0 percent in 1988. For ESRD patients under 35, 44.9 percent had a functioning graft in 1988.

It is generally considered that kidney transplantation produces a clinical outcome superior to that of maintenance dialysis; that pediatric patients are better able to grow and develop with a graft; that the quality of life is better with a functioning graft; and that transplantation is more cost effective than dialysis. Despite the high initial cost of transplantation, long-term Medicare expenditures are lower than those of dialysis since patients on dialysis require more medical care than functioning graft patients.

The growth in the number of ESRD enrollees with a functioning graft has declined in recent years, primarily because a shortage of donated kidneys has caused the number of transplants to remain essentially unchanged since 1986. In the three years prior to 1986, the number of functioning graft enrollees grew at an AARC of 22.0 percent. In 1986-88 the rate of increase was 13.2 percent. During 1987-1988, the most recent year for which data are available, growth was only 10.5 percent.

Table 66: Medicare end stage renal disease (ESRD) enrollment, by dialysis and functioning grafts: Calendar years 1978-88

- On December 31, 1988, Medicare covered 134,786 ESRD patients: 105,096 (78 percent) on dialysis and 29,690 (22 percent) with a functioning graft (Figure 21).
- The number of Medicare ESRD enrollees grew at an AARC of 11.8 percent between 1978 and 1988. This growth rate has slowed somewhat in recent years to 7.8 percent in 1987-88, but it remains greater than the rate of growth of the entire Medicare population (1.8 percent in 1987-88.)
- The number of enrollees with a functioning kidney graft transplant has grown at a rate of 19.6 percent (1978-1988) compared with an AARC of 10.4 percent for dialysis patients. As a result, the proportion of enrollees with a functioning graft has grown from 11.2 percent to 22.0 percent of all ESRD users.

Table 67: Medicare end stage renal disease (ESRD) enrollment for dialysis patients, by demographic characteristics and primary diagnosis: Selected calendar years 1983-88

- Medicare had 105,096 ESRD enrollees on dialysis as of December 31, 1988. This is a 7.4 percent AARC over December 31, 1983 and a 7.1 percent increase over the previous year.
- Males comprised 52.2 percent of all dialysis enrollees on December 31, 1988.
- However, the number of female patients has been increasing faster than the number of men, with AARCs since 1983 of 8.1 and 6.7, respectively.
- There are dialysis patients of all ages. However, just under one-half (47.9 percent) are in the 55-74 age range. The fastest growing age groups are 65-74 and 75 years and over with AARCs of 9.8 and 16.1, respectively, between 1983-88. Dialysis patients are older than the functioning graft population and they are getting older.
- Dialysis patients are predominately of the white race, but non-whites comprise 39.2 percent of the total.
- Among the non-whites, 93 percent are black with the rest consisting of Asians and Native Americans.
- Blacks represent a larger share of the dialysis population than they do of the U.S. population because they are more likely than whites of similar age and sex to have ESRD and because they are less likely to have a transplant.

Medicare, as part of the billing process, requires physicians to give their best opinion as to the primary reason a person developed ESRD. The three most common causes of ESRD for dialysis patients are hypertension (24.8 percent), diabetes (22.0 percent), and glomerulonephritis (16.6 percent).

Other kidney diseases comprise most of the remaining patients for whom a primary disease was assigned. Diabetes and hypertension—diseases that disproportionately affect older and black Americans—are the fastest growing causes of ESRD, with AARCs from 1983-85 of 17.8 and 12.8 percent, respectively.

Table 68: Medicare end stage renal disease (ESRD) enrollment for patients with functioning grafts, by demographic characteristics and primary diagnosis: Selected calendar years 1983-88

- On December 31, 1988, there were 29,690 Medicare ESRD patients with functioning grafts. This is an 18.4 percent AARC over December 31, 1983 and a 10.5 percent increase over the previous year.
- Males comprised 62.1 percent of all functioning graft enrollees on December 31, 1988.
- However, the number of female patients has been increasing slightly faster than the number of men, with AARCs since 1983 of 18.9 percent and 17.9, percent respectively.
- Medicare participants with functioning grafts are younger than dialysis patients, 61.8 percent of functioning graft beneficiaries are under age 45 compared with 24.2 percent of dialysis patients.
- The fastest growing age groups are 65-74 and 75 years and over with AARC's of 38.4 percent and 32.3 percent, respectively, in 1988.
- This rapid growth represents growth in the elderly ESRD population and an increasing proportion of transplants going to older persons. However, persons 65 and over still comprise only 3.4 percent of the functioning graft Medicare enrollees.
- Pediatric patients (under age 15) are a numerically small group, but these patients require careful medical care to insure they achieve normal growth and development.
- An estimated 55.8 percent of Medicare pediatric ESRD patients were on a functioning graft in 1988.
- The low and, in 1988, negative rates of growth in the number of pediatric dialysis patients are due to high transplantation rates.
- Persons of the white race comprise 77.9 percent of the functioning graft population.
- Of the non-whites, 93 percent are black; the rest consist of Asians and Native Americans. As mentioned above, whites are 60.8 percent of the dialysis population.
- The three most common primary diseases for ESRD patients with functioning grafts are hypertension (11.4 percent), diabetes (17.7 percent) and glomerulonephritis (27.3 percent).
- Glomerulonephritis and other kidney disease patients are more likely to be treated by a graft kidney than dialysis because they tend to be younger and in better health than diabetic or hypertensive ESRD patients.

Table 69: Total Medicare expenditures for end stage renal disease (ESRD) patients, by type of service within patient treatment group: Calendar years 1985-88

ESRD patients have been divided into four treatment groups based on their methods of treatment during the entire calendar year, or that part of the calendar year in which they were alive and ESRD if this is less than the entire year. Persons who received dialysis the entire part of the year they were ESRD were classified as a dialysis patient. Anyone receiving a transplant is a transplant recipient. Graft failure patients include anyone with a graft failure whose transplant preceded that calendar year. Functioning graft patients were on a kidney transplanted in a prior year.

The expenditures in Table 69 are for all Medicare expenditures on the patient's behalf. For example, expenditures for transplant patients include not only the transplant operation, but also for dialysis for the part of the year before their transplant and medical services unrelated to ESRD.

- Medicare expenditures for ESRD patients were $3.7 billion in 1988. This is a 11.8 percent average annual rate of growth since 1985.
- Dialysis patients consumed $3.1 billion or 81.7 percent of total 1988 Medicare ESRD expenditures.
- Transplant patients required $0.5 billion, 12.6 percent of the total. Functioning graft and graft failure patients used $157 million and $57 million, or 4.2 and 1.5 percent, respectively.
- Functioning graft patients had the fastest growing Medicare expenditures with an AARC of 21.6 percent during 1985-88. These higher costs are due mainly to the increasing number of patients with functioning grafts.
- Transplant patient costs grew the least, at a rate of 10.0 percent. Dialysis beneficiary costs grew at a 11.6 percent rate.
- Outpatient ESRD costs generally grew at a slower rate than did other types of expenditures. This is because dialysis treatment payments are the major component of outpatient costs (except for functioning graft patients) and the dialysis composite rate (the amount Medicare allows for a dialysis session) was decreased during the 1985-88 period.

Table 70: Medicare expenditures for end stage renal disease (ESRD) patients, by patient treatment group: Calendar years 1985-88

Table 70 gives the number of beneficiaries, total expenditures and estimated per person expenditures by patient treatment group for calendar years 1985-88. Care must be used interpreting these data, particularly the per person expenditures.

The beneficiary numbers differ from that given in Table 66 because they count all persons who were ESRD and Medicare entitled at anytime during the calendar year. This number shows the number of people served by the ESRD program during the year, but does not accurately reflect the number of person-years since many of these persons are only alive and/or ESRD for a portion of the year.

The per person amounts represent average Medicare expenditures. Many medical costs are not covered by Medicare. More importantly, the underlying populations are different among the different treatment groups. For example, dialysis patients are older and more likely to have other serious chronic diseases. Also, on the average, dialysis patients live fewer days per calendar year so the costs will be for fewer person-years. Another major complication is that Medicare is a secondary payer for patients eligible solely due to ESRD for the year following onset of ESRD. These patients will be Medicare eligible, but Medicare will pay only a small proportion of their medical costs. For these persons the per person Medicare costs may be small regardless of their actual use of medical services. The Medicare secondary payor rule effects patients among all treatment groups but is especially important for transplant recipients. For transplant patients in particular, the costs in Table 5 accurately represent their cost to Medicare but do not necessarily reflect their total medical costs or the cost of a transplantation.

- The average Medicare ESRD expenditure per person was $23,270 in 1988. This is a 2.9 percent per year increase over 1985.
- Transplant recipients were most costly for Medicare at $58,023 per person. However, successful transplants—that is functioning graft patients—were the least expensive at $6,144 per person.
- The cost for patients experiencing a graft failure was $34,571 per person; and for dialysis patients, $24,367.

Table 66

Medicare end stage renal disease (ESRD) enrollment, by dialysis and functioning graft: Calendar years 1978-88

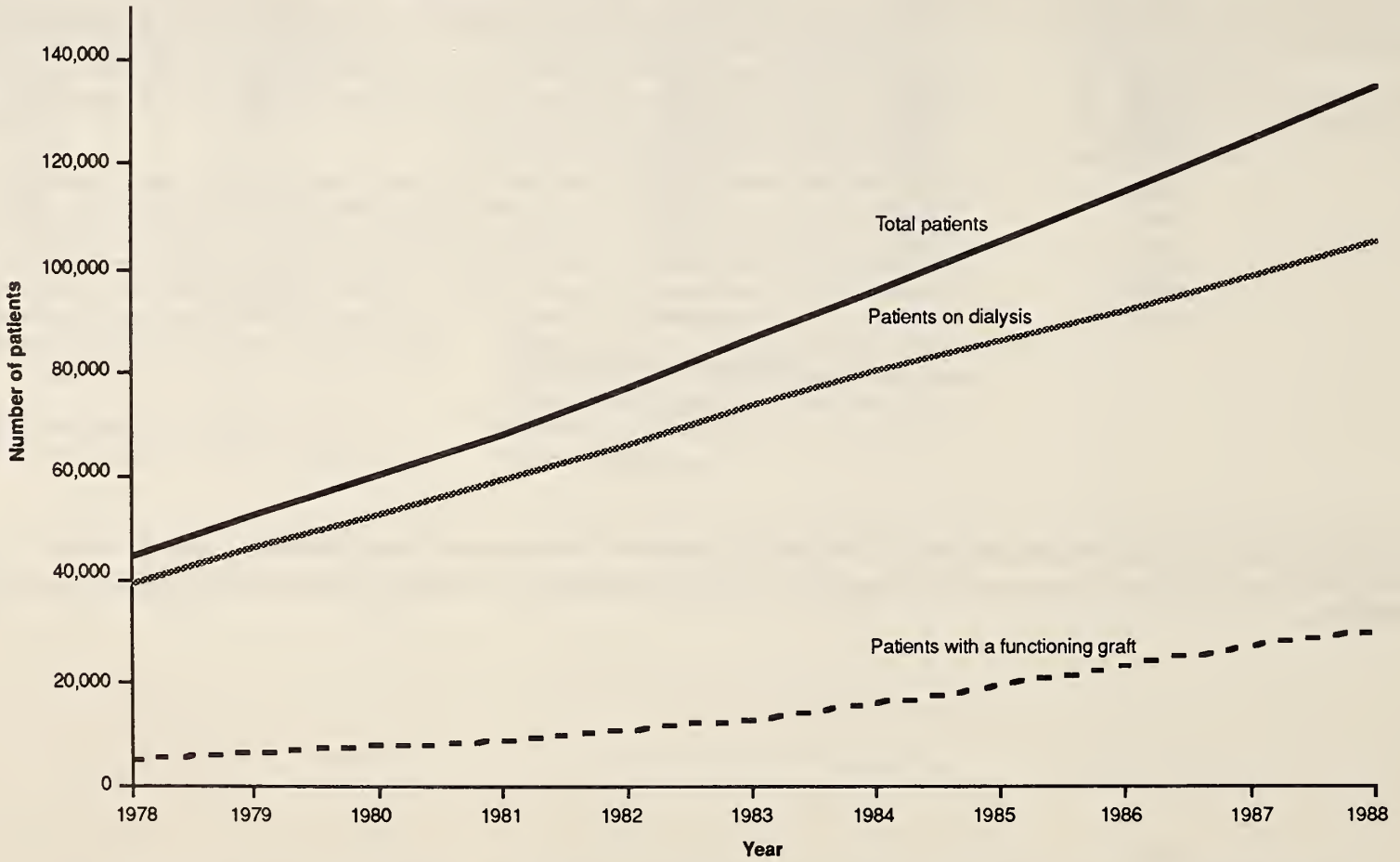
Year	All patients		Patients on dialysis		Patients with a functioning graft	
	Number	Percent	Number	Percent	Number	Percent
1978	44,153	100.0	39,195	88.8	4,958	11.2
1979	52,184	100.0	45,968	88.1	6,216	11.9
1980	60,053	100.0	52,587	87.6	7,466	12.4
1981	67,493	100.0	58,746	87.0	8,747	13
1982	76,316	100.0	65,674	86.1	10,642	13.9
1983	86,354	100.0	73,578	85.2	12,776	14.8
1984	95,522	100.0	79,863	83.6	15,659	16.4
1985	104,879	100.0	85,904	81.9	18,975	18.1
1986	114,659	100.0	91,478	79.8	23,181	20.2
1987	125,011	100.0	98,143	78.5	26,868	21.5
1988	134,786	100.0	105,096	78.0	29,690	22
			Average annual rate of change			
1978-88	11.8	—	10.4	—	19.6	—
			Percent change			
1987-88	7.8	—	7.1	—	10.5	—

NOTE: Enrollment is the number of Medicare beneficiaries with ESRD who are alive and currently entitled, as of December 31. Average annual rate of change is calculated using annual compounding.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the ESRD Program Management and Medical Information System; data development by the Office of Research and Demonstrations.

Figure 21

Medicare end stage renal disease (ESRD) enrollment, by dialysis and functioning graft: Calendar years 1978-88



SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the ESRD Program Management and Medicare Information System; Data development by the Office of Research and Demonstrations.

Table 67

Medicare end stage renal disease (ESRD) program enrollment for dialysis patients, by demographic characteristics and primary diagnosis: Selected calendar years 1983-88

Demographic characteristic and primary diagnosis	1983	1985	1986	1987	1988	Percent of total in 1988	Average annual rate of change 1983-88	Percent change 1987-88
			Number of dialysis patients					
Total	73,578	85,904	91,478	98,143	105,096	100.0	7.4	7.1
Sex								
Male	39,628	45,724	48,244	51,402	54,886	52.2	6.7	6.8
Female	33,950	40,180	43,234	46,741	50,210	47.8	8.1	7.4
Age								
Less than 15 years	669	649	665	673	672	0.6	0.1	-0.1
15-24 years	2,708	2,763	2,689	2,749	2,853	2.7	1.0	3.8
25-34 years	7,194	7,738	7,955	8,175	8,645	8.2	3.7	5.7
35-44 years	9,553	10,791	11,663	12,424	13,386	12.7	7.0	7.7
45-54 years	12,593	13,960	14,440	15,138	16,309	15.5	5.3	7.7
55-64 years	18,378	21,044	21,830	23,067	24,223	23.0	5.7	5.0
65-74 years	16,392	20,223	22,337	24,426	26,133	24.9	9.8	7.0
75 years and over	6,091	8,556	9,899	11,491	12,875	12.3	16.1	12.0
Race 1/								
White	47,042	53,901	56,821	60,324	63,872	60.8	6.3	5.9
Nonwhite	23,123	28,245	30,588	33,401	36,153	39.2	9.4	8.2
Primary diagnosis								
Unknown	24,754	21,702	20,664	20,555	21,082	20.1	-3.2	2.6
Hypertension	14,321	19,112	21,389	23,861	26,097	24.8	12.8	9.4
Glomerulonephritis	12,338	14,910	15,798	16,701	17,478	16.6	7.2	4.7
Diabetes	10,209	15,248	17,712	20,345	23,111	22.0	17.8	13.6
Cystic kidney disease	3,899	4,492	4,679	4,837	4,908	4.7	4.7	1.5
Obstructive nephropathy	2,841	3,008	2,999	3,005	3,059	2.9	1.5	1.8
Interstitial nephritis	2,644	3,665	3,977	4,066	4,180	4.0	9.6	2.8
Other	2,572	3,767	4,260	4,773	5,181	4.0	15.0	8.5

1/ Excludes unknown race.

NOTES: All calculations are based on unrounded numbers. Average annual rate of change calculated by use of compounding. Data are as of December 31 of each year.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the ESRD Program Management and Medical Information System, August 1990 update; data development by the Office of Research and Demonstrations.

Table 68

Medicare end stage renal disease program enrollment for patients with functioning grafts, by demographic characteristics and primary diagnosis: Selected calendar years 1983-88

Demographic characteristic and primary diagnosis	1983	1985	1986	1987	1988	Percent of total in 1988	Average annual rate of change 1983-88	Percent change 1987-88
	Number of patients with functioning graft							
Total	12,776	18,975	23,181	26,868	29,690	100.0	18.4	10.5
Sex								
Male	8,084	11,982	14,645	16,858	18,448	62.1	17.9	9.4
Female	4,730	6,993	8,536	10,010	11,242	37.9	18.9	12.3
Age								
Less than 15 years	418	635	725	806	850	2.9	15.3	5.5
15-24 years	1,629	2,018	2,279	2,399	2,369	8.0	7.8	-1.3
25-34 years	3,752	5,133	6,026	6,525	6,706	22.6	12.3	2.8
35-44 years	3,348	5,278	6,500	7,548	8,397	28.3	20.2	11.2
45-54 years	2,374	3,649	4,559	5,557	6,398	21.5	21.9	15.1
55-64 years	1,105	1,944	2,615	3,301	3,959	13.3	29.1	19.9
65-74 years	147	306	458	701	970	3.3	45.8	38.4
75 years and over	3	12	19	31	41	0.1	68.7	32.3
Race 1/								
White	9,995	14,827	18,136	21,051	23,133	77.9	18.3	9.9
Nonwhite	2,486	3,908	4,794	5,817	6,557	22.1	21.4	12.7
Primary diagnosis								
Unknown	4,656	5,368	6,037	6,584	6,917	23.3	8.2	5.1
Glomerulonephritis	3,381	5,234	6,338	7,390	8,091	27.3	19.1	9.5
Hypertension	1,148	1,932	2,456	2,930	3,397	11.4	24.2	15.9
Diabetes	569	2,884	3,830	4,619	5,254	17.7	56.0	13.7
Cystic kidney disease	569	1,061	1,352	1,704	2,036	6.9	29.0	19.5
Obstructive Nephropathy	496	613	711	774	799	2.7	10.0	3.2
Interstital nephritis	422	801	986	1157	1259	4.2	24.4	8.8
Other	538	2531	3,168	1,710	1,937	6.5	29.2	13.3

1/ Excludes unknown race.

NOTES: All calculations are based on unrounded numbers. Average annual rate of change calculated by use of compounding. Data are as of December 31 of each year.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the ESRD Program Management and Medical Information System; data development by the Office of Research and Demonstrations.

Table 69

Total Medicare expenditures for end stage renal disease (ESRD) patients, by type of service within patient treatment group: Calendar years 1985-88

Type of service within patient treatment group	1985	1986	1987	1988	Average annual percent change 1985-88
	Total Medicare expenditures in millions				
All ESRD beneficiaries					
Total	$2,680.1	$3,108.6	$3,441.7	$3,748.5	11.8
Inpatient	1,215.7	1,434.9	1,565.4	1,725.2	12.4
Outpatient	957.3	1,076.6	1,177.4	1,259.0	9.6
Physician/supplier	492.5	581.1	682.0	745.3	14.8
Other	14.7	16.0	17.0	18.8	8.5
Dialysis patients					
Total	$2,204.8	$2,513.9	$2,796.6	$3,063.5	11.6
Inpatient	866.4	996.0	1,098.8	1,230.6	12.4
Outpatient	898.5	1,004.9	1,097.8	1,174.4	9.3
Physician/supplier	426.6	498.8	585.2	642.2	14.6
Other	13.5	14.1	14.8	16.5	6.9
Patients receiving a transplant					
Total	$353.9	$441.9	$457.0	$470.8	10.0
Inpatient	270.8	340.6	350.7	363.1	10.3
Outpatient	40.4	48.9	50.2	51.3	8.3
Physician/supplier	42.4	51.7	55.6	55.7	9.5
Other	0.4	0.6	0.6	0.7	20.5
Functioning graft patients					
Total	$87.5	$113.3	$137.1	$157.3	21.6
Inpatient	59.5	75.7	86.7	98.6	18.3
Outpatient	9.6	12.9	17.0	20.1	27.9
Physician/supplier	17.7	23.6	32.0	36.9	27.7
Other	0.8	1.1	1.4	1.6	26.0
Patients experiencing a graft failure					
Total	$33.8	$39.4	$51.0	$56.8	18.9
Inpatient	19.1	22.5	29.2	32.8	19.8
Outpatient	8.8	0.8	12.4	13.3	14.8
Physician/supplier	5.9	6.9	9.2	10.5	21.2
Other	0.1	0.2	0.1	0.2	26.0

NOTE: Patients are categorized by treatment method during the calendar year. Dialysis patients, for example, are those receiving dialysis the entire year (or the entire part of the year they have ESRD).

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the ESRD Program Management and Medical Information System; data development by the Office of Research and Demonstrations.

Table 70

Medicare expenditures for end stage renal (ESRD) disease patients, by patient treatment group: Calendar years 1985-88

Type of patient treatment group	1985	1986	1987	1988
			Total number of persons	
All ESRD patients	125,370	136,957	148,771	161,084
Dialysis patients	101,951	109,060	116,858	125,724
Patients receiving a transplant	7,026	8,274	8,235	8,114
Functioning graft patients	15,298	18,408	22,181	25,603
Patients experiencing a graft failure	1,103	1,215	1,497	1,643
			Total expenditures in millions	
All ESRD patients	$2,680.1	$3,108.6	$3,441.7	$3,748.5
Dialysis patients	2,204.8	2,513.9	2,796.6	3,063.5
Patients receiving a transplant	353.9	441.9	457.0	470.8
Functioning graft patients	87.5	113.3	137.1	157.3
Patients experiencing a graft failure	33.8	39.4	51.0	56.8
			Average expenditure per person	
All ESRD patients	$21,376	$22,698	$23,134	$23,270
Dialysis patients	21,626	23,051	23,932	24,367
Patients receiving a transplant	50,370	53,408	55,495	58,023
Functioning graft patients	5,720	6,155	6,181	6,144
Patients experiencing a graft failure	30,644	32,428	34,068	34,571

NOTE: Patients are categorized by treatment method during the calendar year. Dialysis patients, for example, are those receiving dialysis the entire year (or the entire part of the year they have ESRD).

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the ESRD Program Management and Medical Information System; data development by the Office of Research and Demonstrations.

Appendix A
Sources of data

The data contained in this report are derived from the Medicare Decision Support System (MDSS). This data collection system provides the information necessary to measure and evaluate program operations and effectiveness. The MDSS is a byproduct of the data processing required to administer the Medicare program. Thus, several categories of administrative program data have counterparts in the MDSS.

- Claims processing operations furnish information about the amount and kind of hospital and medical services used by Medicare enrollees and program payments for such services.
- Applications submitted by institutional providers to participate in the program provide data on the characteristics of providers of services.
- Various entitlement operations provide data on program eligibility and demographic characteristics of persons enrolled for coverage.
- The health insurance claim number assigned to each enrollee serves as a link among data on volume and types of services used, program payments for such services, and demographic characteristics of each individual.

Basic records

The statistical system is based on four groups of related records: the master enrollment record, the provider of services record, the utilization record for institutional services, and the payment record for physician and other services. Groups of similar individual records are stored together in a variety of basic files.

Master enrollment record

A Medicare master enrollment record identifies each aged and disabled person enrolled for benefits and indicates whether he or she is entitled to hospital insurance benefits, supplementary medical insurance benefits, or both. The enrollment record provides the population data for each part of the program and serves as the base for the computation of a variety of utilization rates.

Provider of service record

Hospital, home health agencies, skilled nursing facilities, outpatient facilities such as rural health clinics and dialysis centers, independent clinical laboratories, and suppliers of portable X-ray or outpatient physical therapy services must apply for participation in the Medicare program. Data on the application forms are stored as individual provider records in a central providers of services file. This file is updated periodically as facilities are recertified, apply for participation, or leave the program. When the information in this provider file is combined with utilization data, characteristics of facilities and agencies that provide care can be related to the kinds and amounts of service used.

Utilization record for institutional services

The administration of the hospital insurance (HI) program requires that two items of information (entitlement status under the program and previous use of benefits) be known about each person at the time of admission to a hospital.

When a Medicare patient is admitted to a hospital, the admission section of the inpatient hospital admission and billing form is completed by the hospital. This record is forwarded to an intermediary, which in turn queries the central office of the Health Care Financing Administration (HCFA) to determine eligibility, deductible status, and benefits remaining. The intermediary is informed of the patient's benefit status and the number of days of inpatient care to which he or she is entitled during the current benefit period. This information is then forwarded to the hospital. At discharge, the hospital completes the billing section of the form and sends it to the intermediary for payment. When payment is approved, the intermediary forwards the claim to HCFA.

The admission notice and subsequent billing forms are used to create various utilization records. As part of this process, information on diagnoses and surgical procedures is coded. Admission (or start of care) notices and billing forms are handled in a comparable manner for home health agencies (under HI and supplementary medical insurance) and skilled nursing facilities. An outpatient hospital billing form is also transmitted to HCFA for entry in central office records after the intermediary approves the bill for payment.

Information on utilization in hospitals and skilled nursing facilities needed to administer the "benefit period" provision is recorded centrally. Each admission and billing form contains the enrollee's claim number and the provider's identification number. The resulting record can readily be

matched to the enrollment files and the provider files. By this process, sample statistical records are created. Different sample size are used for inpatient hospital, skilled nursing facility, home health, and outpatient hospital utilization records. The statistical records contain information used to tabulate and analyze HI and SMI institutional utilization patterns.

Payment record for physician and other services

Payment or reimbursement under the SMI program is made after carriers (or intermediaries involved with SMI noninstitutional providers under the Medicare program) receive bills with allowed charges in excess of the SMI deductible for a calendar year.

To pay an SMI claim, carriers need information from a central source on the enrollee's entitlement status and, for most claims, the amount of the annual deductible that has been met. After the deductible has been met, the only additional information required from HCFA is whether the person is still enrolled under the program. Administration of the SMI program requires accurate and complete information on the amounts paid by carriers for physicians' services and for other health services and suppliers covered by the program. Carriers furnish HCFA a payment record of each bill paid. A bill is defined as a request for payment from, or on behalf of, a beneficiary as a result of services provided by a single physician or supplier.

Appendix B
Description of diagnosis-related groups: Fiscal year 1988

Table 71

Diagnosis-related groups (DRGs), relative weighting factors, geometric mean length of stay, and length of stay (LOS) outlier cutoff points used in the prospective payment system: Fiscal year 1988

DRG codes	Status	Description	Relative weights	Arithmetic mean LOS	Geometric mean LOS	Outlier threshold
		MDC 1 - Diseases and Disorders of the Nervous System (DRGs 1-35)				
1	Surg	CRANIOTOMY AGE >17 EXCEPT FOR TRAUMA	3.4434	18.8	14.2	32
2	Surg	CRANIOTOMY FOR TRAUMA AGE >17	3.8160	18.3	12.6	31
3	Surg	* CRANIOTOMY AGE 0-17	2.9183		12.7	31
4	Surg	SPINAL PROCEDURES	2.5904	16.9	12.5	30
5	Surg	EXTRACRANIAL VASCULAR PROCEDURES	1.5685	8.0	6.7	21
6	Surg	CARPAL TUNNEL RELEASE	.4393	2.6	2.0	7
7	Surg	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC WITH CC	2.5269	20.3	11.2	29
8	Surg	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W/O CC	.7367	5.1	3.4	19
9	Med	SPINAL DISORDERS & INJURIES	1.2639	11.1	7.1	25
10	Med	NERVOUS SYSTEM NEOPLASMS WITH CC	1.2123	11.2	7.6	26
11	Med	NERVOUS SYSTEM NEOPLASMS W/O CC	.7729	7.6	5.2	23
12	Med	DEGENERATIVE NERVOUS SYSTEM DISORDERS	.9459	9.9	6.9	25
13	Med	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA	.9324	9.6	7.2	25
14	Med	SPECIFIC CEREBROVASCULAR DISORDERS EXCEPT TIA	1.2429	10.5	7.5	25
15	Med	TRANSIENT ISCHEMIC ATTACK & PRECEREBRAL OCCLUSIONS	.6293	5.4	4.2	17
16	Med	NONSPECIFIC CEREBROVASCULAR DISORDERS W CC	1.0384	9.0	6.6	25
17	Med	NONSPECIFIC CEREBROVASCULAR DISORDERS W/O CC	.6358	6.0	4.7	20
18	Med	CRANIAL & PERIPHERAL NERVE DISORDERS WITH CC	.9557	8.5	6.3	24
19	Med	CRANIAL & PERIPHERAL NERVE DISORDERS W/O CC	.6158	6.0	4.5	22
20	Med	NERVOUS SYSTEM INFECTION EXCEPT VIRAL MENINGITIS	1.6220	11.2	7.7	26
21	Med	VIRAL MENINGITIS	1.3613	9.2	7.1	25
22	Med	HYPERTENSIVE ENCEPHALOPATHY	.7055	5.8	4.6	18
23	Med	NONTRAUMATIC STUPOR & COMA	.9505	6.7	4.5	22
24	Med	SEIZURE & HEADACHE AGE >17 WITH CC	.9228	7.0	5.2	23
25	Med	SEIZURE & HEADACHE AGE >17 W/O CC	.5386	4.6	3.6	15
26	Med	SEIZURE & HEADACHE AGE 0-17	.5635	3.6	2.5	13
27	Med	TRAUMATIC STUPOR & COMA, COMA >1 HR	1.4753	8.7	4.3	22
28	Med	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 WITH CC	1.1694	8.9	5.6	24
29	Med	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W/O CC	.5856	5.2	3.4	20
30	Med	* TRAUMATIC STUPOR & COMA, COMA <1 HR AGE 0-17	.3539		2.0	8
31	Med	CONCUSSION AGE >17 WITH CC	.6550	6.0	4.2	22
32	Med	CONCUSSION AGE >17 W/O CC	.4005	3.7	2.8	13
33	Med	* CONCUSSION AGE 0-17	.2457		1.6	5
34	Med	OTHER DISORDERS OF NERVOUS SYSTEM WITH CC	1.2038	8.7	6.0	24
35	Med	OTHER DISORDERS OF NERVOUS SYSTEM W/O CC	.6035	5.6	4.0	21
		MDC 2 - Diseases and Disorders of the Eye (DRGs 36-48)				
36	Surg	RETINAL PROCEDURES	.6820	3.6	3.1	10
37	Surg	ORBITAL PROCEDURES	.7104	4.1	3.0	14
38	Surg	PRIMARY IRIS PROCEDURES	.3779	2.8	2.2	9
39	Surg	LENS PROCEDURES WITH OR WITHOUT VITRECTOMY	.5167	2.1	1.8	5
40	Surg	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE >17	.4675	2.6	2.0	7
41	Surg	* EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE 0-17	.3657		1.6	4
42	Surg	INTRAOCULAR PROCEDURES EXCEPT RETINA, IRIS & LENS	.6600	3.1	2.5	9
43	Med	HYPHEMA	.3727	4.5	3.7	14

See footnotes at end of table.

Table 71—Continued

Diagnosis-related groups (DRGs), relative weighting factors, geometric mean length of stay, and length of stay (LOS) outlier cutoff points used in the prospective payment system: Fiscal year 1988

DRG codes	Status	Description	Relative weights	Arithmetic mean LOS	Geometric mean LOS	Outlier threshold
44	Med	ACUTE MAJOR EYE INFECTIONS	.6352	6.8	5.6	20
45	Med	NEUROLOGICAL EYE DISORDERS	.5595	4.3	3.3	14
46	Med	OTHER DISORDERS OF THE EYE AGE >17 W CC	.6195	5.6	3.8	22
47	Med	OTHER DISORDERS OF THE EYE AGE >17 W/O CC	.3611	3.6	2.6	13
48	Med	* OTHER DISORDERS OF THE EYE AGE 0-17	.4018		2.9	13
		MDC 3 - Diseases and Disorders of the Ear, Nose, Mouth and Throat (DRGs 49-74, 168-169, 185-187)				
49	Surg	MAJOR HEAD & NECK PROCEDURES	2.8923	15.7	11.9	30
50	Surg	SIALOADENECTOMY	.6681	3.4	2.8	9
51	Surg	SALIVARY GLAND PROCEDURES EXCEPT SIALOADENECTOMY	.5424	2.9	2.3	8
52	Surg	CLEFT LIP & PALATE REPAIR	.7033	3.5	2.7	11
53	Surg	SINUS & MASTOID PROCEDURES AGE >17	.6159	3.1	2.3	10
54	Surg	* SINUS & MASTOID PROCEDURES AGE 0-17	.6889		3.2	11
55	Surg	MISCELLANEOUS EAR, NOSE, MOUTH & THROAT PROCEDURES	.4598	2.3	1.8	6
56	Surg	RHINOPLASTY	.4471	2.4	1.8	7
57	Surg	T&A PROC, EXCEPT TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	.7907	5.1	3.2	20
58	Surg	* T&A PROC, EXCEPT TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE 0-17	.3097		1.5	3
59	Surg	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	.3845	2.0	1.7	5
60	Surg	* TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE 0-17	2616		1.5	3
61	Surg	MYRINGOTOMY W TUBE INSERTION AGE >17	.5401	3.2	2.1	11
62	Surg	* MYRINGOTOMY W TUBE INSERTION AGE 0-17	.3089		1.3	3
63	Surg	OTHER EAR, NOSE, MOUTH & THROAT O.R. PROCEDURES	1.1538	7.4	4.6	23
64	Med	EAR, NOSE, MOUTH & THROAT MALIGNANCY	1.0548	8.5	4.7	23
65	Med	DYSEQUILIBRIUM	.4600	4.2	3.5	12
66	Med	EPISTAXIS	.4272	3.9	3.2	12
67	Med	EPIGLOTTITIS	.9964	5.8	4.4	19
68	Med	OTITIS MEDIA & URI AGE >17 WITH CC	.7217	6.1	5.1	17
69	Med	OTITIS MEDIA & URI AGE >17 W/O CC	.5366	4.9	4.1	14
70	Med	OTITIS MEDIA & URI AGE 0-17	.5345	4.0	3.2	13
71	Med	LARYNGOTRACHEITIS	.6026	4.7	3.9	14
72	Med	NASAL TRAUMA & DEFORMITY	.4895	4.3	3.1	15
73	Med	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE >17	.7404	5.6	3.7	22
74	Med	* OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE 0-17	.3427		2.1	9
168	Surg	MOUTH PROCEDURES WITH CC	1.4067	8.2	4.8	23
169	Surg	MOUTH PROCEDURES W/O CC	.6689	3.6	2.6	12
185	Med	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE >17	.7530	6.4	4.3	22
186	Med	* DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE 0-17	.4112		2.9	11
187	Med	DENTAL EXTRACTIONS & RESTORATIONS	.4540	2.8	2.2	8
		MDC 4 - Diseases and Disorders of the Respiratory System (DRGs 75-102, 474 475)				
75	Surg	MAJOR CHEST PROCEDURES	3.0258	14.9	12.3	30
76	Surg	OTHER RESP SYSTEM O.R. PROCEDURES W CC	2.0885	12.6	8.8	27
77	Surg	OTHER RESP SYSTEM O.R. PROCEDURES W/O CC	1.0970	6.8	4.4	22
78	Med	PULMONARY EMBOLISM	1.4817	10.8	9.0	27

See footnotes at end of table.

Table 71—Continued

Diagnosis-related groups (DRGs), relative weighting factors, geometric mean length of stay, and length of stay (LOS) outlier cutoff points used in the prospective payment system: Fiscal year 1988

DRG codes	Status	Description	Relative weights	Arithmetic mean LOS	Geometric mean LOS	Outlier threshold
79	Med	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 WITH CC	2.0777	12.8	9.7	28
80	Med	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W/O CC	1.3341	9.7	7.7	26
81	Med	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE 0-17	1.1032	9.5	7.0	25
82	Med	RESPIRATORY NEOPLASMS	1.1899	9.3	6.5	24
83	Med	MAJOR CHEST TRAUMA WITH CC	.9698	8.4	6.5	25
84	Med	MAJOR CHEST TRAUMA W/O CC	.5372	5.4	4.3	17
85	Med	PLEURAL EFFUSION WITH CC	1.1451	9.0	6.8	25
86	Med	PLEURAL EFFUSION W/O CC	.7720	6.6	4.9	23
87	Med	PULMONARY EDEMA & RESPIRATORY FAILURE	1.5691	8.4	6.1	24
88	Med	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	1.1263	7.9	6.3	24
89	Med	SIMPLE PNEUMONIA & PLEURISY AGE >17 WITH CC	1.2862	9.2	7.3	25
90	Med	SIMPLE PNEUMONIA & PLEURISY AGE >17 W/O CC	.8961	7.1	6.1	19
91	Med	SIMPLE PNEUMONIA & PLEURISY AGE 0-17	.9448	6.3	4.9	23
92	Med	INTERSTITIAL LUNG DISEASE WITH CC	1.2821	8.9	6.8	25
93	Med	INTERSTITIAL LUNG DISEASE W/O CC	.8264	6.6	5.1	23
94	Med	PNEUMOTHORAX WITH CC	1.3954	9.7	7.4	25
95	Med	PNEUMOTHORAX W/O CC	.7571	6.5	5.2	21
96	Med	BRONCHITIS & ASTHMA AGE >17 WITH CC	.9804	7.2	6.0	20
97	Med	BRONCHITIS & ASTHMA AGE >17 W/O CC	.7151	5.7	4.9	15
98	Med	BRONCHITIS & ASTHMA AGE 0-17	.5744	3.7	3.0	11
99	Med	RESPIRATORY SIGNS & SYMPTOMS WITH CC	.7803	5.6	4.2	19
100	Med	RESPIRATORY SIGNS & SYMPTOMS W/O CC	.5238	3.6	2.9	11
101	Med	OTHER RESPIRATORY SYSTEM DIAGNOSES WITH CC	.9585	7.1	5.4	23
102	Med	OTHER RESPIRATORY SYSTEM DIAGNOSES W/O CC	.5593		3.4	31
474		RESPIRATORY SYSTEM DIAGNOSIS WITH TRACHEOSTOMY	11.8772	42.9	33.3	51
475	Med	RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT	3.1757	12.8	8.8	27
		MDC 5 - Diseases and Disorders of the Circulatory System (DRGs 103-145)				
103	Surg	HEART TRANSPLANT	11.9225	33.3	25.8	44
104	Surg	CARDIAC VALVE PROCEDURE W PUMP & W CARDIAC CATH	7.3424	20.4	17.4	35
105	Surg	CARDIAC VALVE PROCEDURE W PUMP & W/O CARDIAC CATH	5.7811	15.8	13.2	31
106	Surg	CORONARY BYPASS W CARDIAC CATH	5.5415	16.0	14.2	32
107	Surg	CORONARY BYPASS W/O CARDIAC CATH	4.2858	12.6	11.1	29
108	Surg	OTHER CARDIOTHORACIC OR VASCULAR PROCEDURES, W PUMP	5.3703	15.7	11.0	29
109	Surg	OTHER CARDIOTHORACIC PROCEDURES W/O PUMP	3.9142	12.3	7.4	25
110	Surg	MAJOR RECONSTRUCTIVE VASCULAR PROC W/O PUMP WITH CC	3.6718	16.1	12.7	31
111	Surg	MAJOR RECONSTRUCTIVE VASCULAR PROC W/O PUMP W/O CC	2.2639	10.6	9.3	27
112	Surg	VASCULAR PROCEDURES EXCEPT MAJOR RECONSTRUCTION W/O PUMP	1.8911	8.2	5.9	24
113	Surg	AMPUTATION FOR CIRC SYSTEM DISORDERS EXCEPT UPPER LIMB & TOE	2.4590	18.8	14.7	33
114	Surg	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS	1.7040	14.0	10.3	28
115	Surg	PERM CARDIAC PACEMAKER IMPLANT W AMI, HEART FAILURE OR SHOCK	4.0516	15.2	12.9	31
116	Surg	PERM CARDIAC PACEMAKER IMPLANT W/O AMI, HEART FAILURE OR SHOCK	2.7694	8.3	6.6	25
117	Surg	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT	1.2261	6.2	4.5	22
118	Surg	CARDIAC PACEMAKER DEVICE REPLACEMENT	1.7563	4.1	3.0	14
119	Surg	VEIN LIGATION & STRIPPING	.8692	6.3	4.3	22
120	Surg	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	2.4776	16.6	11.1	29

See footnotes at end of table.

Table 71—Continued

Diagnosis-related groups (DRGs), relative weighting factors, geometric mean length of stay, and length of stay (LOS) outlier cutoff points used in the prospective payment system: Fiscal year 1988

DRG codes	Status	Description	Relative weights	Arithmetic mean LOS	Geometric mean LOS	Outlier threshold
121	Med	CIRCULATORY DISORDERS W AMI & C.V. COMP DISCH ALIVE	1.7162	11.2	9.4	27
122	Med	CIRCULATORY DISORDERS W AMI W/O C.V. COMP DISCH ALIVE	1.2002	8.7	7.3	29
123	Med	CIRCULATORY DISORDERS W AMI, EXPIRED	1.3979	5.3	2.9	21
124	Med	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH & COMPLEX DIAG	1.1806	6.2	4.5	22
125	Med	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O COMPLEX DIAG	.6884	3.2	2.5	10
126	Med	ACUTE & SUBACUTE ENDOCARDITIS	3.0575	22.7	17.2	35
127	Med	HEART FAILURE & SHOCK	1.0222	7.9	6.2	24
128	Med	DEEP VEIN THROMBOPHLEBITIS	.8513	9.1	8.0	22
129	Med	CARDIAC ARREST, UNEXPLAINED	1.5715	5.9	3.0	21
130	Med	PERIPHERAL VASCULAR DISORDERS WITH CC	.8776	7.8	5.6	24
131	Med	PERIPHERAL VASCULAR DISORDERS W/O CC	.5862	5.6	4.0	22
132	Med	ATHEROSCLEROSIS WITH CC	.7976	6.0	4.7	19
133	Med	ATHEROSCLEROSIS W/O CC	.5997	4.6	3.7	14
134	Med	HYPERTENSION	.6088	5.5	4.4	17
135	Med	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE > 17 WITH CC	.9221	7.0	5.2	23
136	Med	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE > 17 W/O CC	.6103	4.8	3.8	15
137	Med	* CARDIAC CONGENITAL & VALVULAR DISORDERS AGE 0-17	.6315		3.3	21
138	Med	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS WITH CC	.8535	6.2	4.8	20
139	Med	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W/O CC	.5912	4.5	3.6	14
140	Med	ANGINA PECTORIS	.6689	5.0	4.1	14
141	Med	SYNCOPE & COLLAPSE WITH CC	.6801	5.5	4.4	17
142	Med	SYNCOPE & COLLAPSE W/O CC	.5244	4.2	3.4	13
143	Med	CHEST PAIN	.5500	3.7	3.0	11
144	Med	OTHER CIRCULATORY SYSTEM DIAGNOSES W CC	1.1449	7.8	5.8	24
145	Med	OTHER CIRCULATORY SYSTEM DIAGNOSES W/O CC	.6689	5.0	3.8	17
		MDC 6 - Diseases and Disorders of the Digestive System (DRGs 146-167, 170-184, 188-190)				
146	Surg	RECTAL RESECTION WITH CC	3.4379	18.0	15.6	34
147	Surg	RECTAL RESECTION W/O CC	2.1344	13.0	12.0	27
148	Surg	MAJOR SMALL & LARGE BOWEL PROCEDURES WITH CC	3.2376	17.1	14.5	33
149	Surg	MAJOR SMALL & LARGE BOWEL PROCEDURES W/O CC	1.8341	11.6	10.7	24
150	Surg	PERITONEAL ADHESIOLYSIS WITH CC	2.6797	15.0	12.7	31
151	Surg	PERITONEAL ADHESIOLYSIS W/O CC	1.4885	10.0	8.9	24
152	Surg	MINOR SMALL & LARGE BOWEL PROCEDURES WITH CC	1.5988	10.6	8.4	26
153	Surg	MINOR SMALL & LARGE BOWEL PROCEDURES W/O CC	1.0566	7.8	6.7	23
154	Surg	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE > 17 WITH CC	3.7961	17.4	13.4	31
155	Surg	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE > 17 W/O CC	1.8195	10.8	8.9	27
156	Surg	* STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE 0-17	.8382		6.0	21
157	Surg	ANAL & STOMAL PROCEDURES WITH CC	.9324	7.0	5.3	23
158	Surg	ANAL & STOMAL PROCEDURES W/O CC	.5449	4.2	3.3	13
159	Surg	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 WITH CC	1.1454	7.5	6.0	23
160	Surg	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W/O CC	.6810	4.7	4.0	14
161	Surg	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 WITH CC	.7541	5.1	4.0	16
162	Surg	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 W/O CC	.5004	3.3	2.8	9
163	Surg	HERNIA PROCEDURES AGE 0-17	.7717	4.4	3.9	11

See footnotes at end of table.

Table 71—Continued

Diagnosis-related groups (DRGs), relative weighting factors, geometric mean length of stay, and length of stay (LOS) outlier cutoff points used in the prospective payment system: Fiscal year 1988

DRG codes	Status	Description	Relative weights	Arithmetic mean LOS	Geometric mean LOS	Outlier threshold
164	Surg	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG WITH CC	2.4014	12.6	11.0	29
165	Surg	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC	1.4675	8.7	8.1	18
166	Surg	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG WITH CC	1.4954	8.8	7.4	23
167	Surg	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC	.8651	5.4	4.8	12
170	Surg	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES WITH CC	2.7316	16.2	11.5	29
171	Surg	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W/O CC	1.4018	9.4	6.7	25
172	Med	DIGESTIVE MALIGNANCY WITH CC	1.1861	10.3	6.9	25
173	Med	DIGESTIVE MALIGNANCY W/O CC	.7049	6.6	4.4	22
174	Med	G.I. HEMORRHAGE WITH CC	.9878	7.1	5.6	22
175	Med	G.I. HEMORRHAGE W/O CC	.6600	5.3	4.4	15
176	Med	COMPLICATED PEPTIC ULCER	.9964	7.8	6.1	24
177	Med	UNCOMPLICATED PEPTIC ULCER WITH CC	.7834	6.5	5.5	18
178	Med	UNCOMPLICATED PEPTIC ULCER W/O CC	.5838	5.1	4.3	14
179	Med	INFLAMMATORY BOWEL DISEASE	1.0416	9.1	7.1	25
180	Med	G.I. OBSTRUCTION WITH CC	.9150	7.6	5.8	24
181	Med	G.I. OBSTRUCTION W/O CC	.5415	5.1	4.1	16
182	Med	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 WITH CC	.7224	6.2	4.9	19
183	Med	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 W/O CC	.5252	4.6	3.7	14
184	Med	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE 0-17	.4223	3.5	2.4	13
188	Med	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 WITH CC	.9144	6.9	4.9	23
189	Med	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 W/O CC	.4966	4.2	3.0	15
190	Med	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE 0-17	.8147	4.9	3.9	15
		MDC 7 - Diseases and Disorders of the Hepatobiliary System and Pancreas (DRGs 191-208)				
191	Surg	PANCREAS, LIVER & SHUNT PROCEDURES WITH CC	4.6881	20.7	16.7	35
192	Surg	PANCREAS, LIVER & SHUNT PROCEDURES W/O CC	3.8625	19.5	14.4	32
193	Surg	BILIARY TRACT PROC W CC EXCEPT ONLY TOT CHOLECYST W OR W/O C.D.E	3.0252	17.5	14.5	32
194	Surg	BILIARY TRACT PROC W/O CC EXCEPT ONLY TOT CHOLECYST W OR W/O C.D.E	1.8505	12.3	10.0	28
195	Surg	TOTAL CHOLECYSTECTOMY W C.D.E. WITH CC	2.3854	13.9	12.4	30
196	Surg	TOTAL CHOLECYSTECTOMY W C.D.E. W/O CC	1.6898	10.8	10.0	22
197	Surg	TOTAL CHOLECYSTECTOMY W/O C.D.E. WITH CC	1.8768	11.2	9.8	27
198	Surg	TOTAL CHOLECYSTECTOMY W/O C.D.E. W/O CC	1.1152	7.5	7.0	15
199	Surg	HEPATOBILIARY DIAGNOSTIC PROCEDURE FOR MALIGNANCY	2.2693	15.3	12.3	30
200	Surg	HEPATOBILIARY DIAGNOSTIC PROCEDURE FOR NON-MALIGNANCY	2.4731	13.5	9.4	27
201	Surg	OTHER HEPATOBILIARY OR PANCREAS O.R. PROCEDURES	2.3933	12.8	8.3	26
202	Med	CIRRHOSIS & ALCOHOLIC HEPATITIS	1.2075	9.9	7.2	25
203	Med	MALIGNANCY OF HEPATOBILIARY SYSTEM OR PANCREAS	1.0422	9.3	6.4	24
204	Med	DISORDERS OF PANCREAS EXCEPT MALIGNANCY	1.0269	7.7	6.1	24
205	Med	DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC HEPA WITH CC	1.2132	9.3	6.7	25
206	Med	DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC HEPA W/O CC	.6808	6.0	4.2	22
207	Med	DISORDERS OF THE BILIARY TRACT WITH CC	.9243	7.1	5.6	23
208	Med	DISORDERS OF THE BILIARY TRACT W/O CC	.5816	4.7	3.8	15

See footnotes at end of table.

Table 71—Continued

Diagnosis-related groups (DRGs), relative weighting factors, geometric mean length of stay, and length of stay (LOS) outlier cutoff points used in the prospective payment system: Fiscal year 1988

DRG codes	Status	Description	Relative weights	Arithmetic mean LOS	Geometric mean LOS	Outlier threshold
		MDC 8 - Diseases and Disorders of the Musculoskeletal System and Connective Tissue (DRGs 209-256, 471)				
209	Surg	MAJOR JOINT & LIMB REATTACHMENT PROCEDURES	2.4145	13.4	12.3	28
210	Surg	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 WITH CC	2.1776	15.8	13.5	32
211	Surg	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W/O CC	1.6104	12.3	11.1	27
212	Surg	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE 0-17	1.3764	7.2	6.2	17
213	Surg	AMPUTATION FOR MUSCULOSKELETAL SYSTEM & CONN TISSUE DISORDERS	1.8460	14.3	10.5	29
214	Surg	BACK & NECK PROCEDURES WITH CC	2.1385	15.3	12.8	31
215	Surg	BACK & NECK PROCEDURES W/O CC	1.3768	10.3	9.0	26
216	Surg	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	1.5973	13.0	8.4	26
217	Surg	WND DEBRID & SKN GRFT EXCEPT HAND,FOR MUSCSKELET & CONN TISS DIS	2.8155	20.6	12.9	31
218	Surg	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE >17 WITH CC	1.6224	11.5	9.0	27
219	Surg	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE >17 W/O CC	1.0186	7.1	5.9	20
220	Surg	* LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE 0-17	.9242		5.3	23
221	Surg	KNEE PROCEDURES WITH CC	1.4523	9.5	6.3	24
222	Surg	KNEE PROCEDURES W/O CC	.7995	4.7	3.3	18
223	Surg	MAJOR SHOULDER/ELBOW PROC, OR OTHER UPPER EXTREMITY PROC W CC	1.1202	6.9	5.2	22
224	Surg	SHOULDER,ELBOW OR FOREARM PROC,EXC MAJOR JOINT PROC, W/O CC	.6588	3.9	3.1	12
225	Surg	FOOT PROCEDURES	.6775	4.3	3.2	14
226	Surg	SOFT TISSUE PROCEDURES WITH CC	1.3570	10.1	6.8	25
227	Surg	SOFT TISSUE PROCEDURES W/O CC	.6878	4.6	3.4	16
228	Surg	MAJOR THUMB OR JOINT PROC,OR OTH HAND OR WRIST PROC W CC	.8201	4.3	3.2	14
229	Surg	HAND OR WRIST PROC, EXCEPT MAJOR JOINT PROC, W/O CC	.5202	2.7	2.1	8
230	Surg	LOCAL EXCISION & REMOVAL OF INT FIX DEVICES OF HIP & FEMUR	.8868	6.7	4.6	23
231	Surg	LOCAL EXCISION & REMOVAL OF INT FIX DEVICES EXCEPT HIP & FEMUR	.8346	5.5	3.5	21
232	Surg	ARTHROSCOPY	.8603	5.3	3.1	21
233	Surg	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC WITH CC	1.7267	12.5	9.0	27
234	Surg	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W/O CC	.9057	6.5	4.9	23
235	Med	FRACTURES OF FEMUR	1.2060	13.9	8.2	26
236	Med	FRACTURES OF HIP & PELVIS	.9036	10.1	7.2	25
237	Med	SPRAINS, STRAINS, & DISLOCATIONS OF HIP, PELVIS & THIGH	.5959	6.4	4.8	23
238	Med	OSTEOMYELITIS	1.6579	14.6	10.7	29
239	Med	PATHOLOGICAL FRACTURES & MUSCULOSKELETAL & CONN TISS MALIGNANCY	.9550	9.9	7.5	26
240	Med	CONNECTIVE TISSUE DISORDERS WITH CC	1.0932	9.5	7.3	25
241	Med	CONNECTIVE TISSUE DISORDERS W/O CC	.6644	6.9	5.4	22
242	Med	SEPTIC ARTHRITIS	1.4100	11.6	8.9	27
243	Med	MEDICAL BACK PROBLEMS	.6694	6.9	5.3	23
244	Med	BONE DISEASES & SPECIFIC ARTHROPATHIES WITH CC	.7305	7.5	5.7	24
245	Med	BONE DISEASES & SPECIFIC ARTHROPATHIES W/O CC	.5345	5.6	4.4	19
246	Med	NON-SPECIFIC ARTHROPATHIES	.5769	5.8	4.6	18
247	Med	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN TISSUE	.5407	5.1	3.9	18
248	Med	TENDONITIS, MYOSITIS & BURSITIS	.6097	5.8	4.5	19
249	Med	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	.6830	6.8	4.4	22
250	Med	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 WITH CC	.6721	6.3	4.5	22
251	Med	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W/O CC	.4148	3.4	2.5	11
252	Med	* FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE 0-17	.3496		1.8	7

See footnotes at end of table.

Table 71—Continued

Diagnosis-related groups (DRGs), relative weighting factors, geometric mean length of stay, and length of stay (LOS) outlier cutoff points used in the prospective payment system: Fiscal year 1988

DRG codes	Status	Description	Relative weights	Arithmetic mean LOS	Geometric mean LOS	Outlier threshold
253	Med	FX, SPRN, STRN & DISL OF UPARM, LOWLEG EX FOOT AGE >17 WITH CC	.7909	8.3	5.9	24
254	Med	FX, SPRN, STRN & DISL OF UPARM, LOWLEG EX FOOT AGE >17 W/O CC	.4557	5.1	3.8	18
255	Med	* FX, SPRN, STRN & DISL OF UPARM, LOWLEG EX FOOT AGE 0-17	.4638		2.9	15
256	Med	OTHER MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE DIAGNOSES	.6585	5.8	4.1	21
471	Surg	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY	4.0896	20.7	18.1	36
		MDC 9 - Diseases and Disorders of the Skin, Subcutaneous Tissue and Breast (DRGs 257-284)				
257	Surg	TOTAL MASTECTOMY FOR MALIGNANCY WITH CC	1.0448	7.4	6.6	18
258	Surg	TOTAL MASTECTOMY FOR MALIGNANCY W/O CC	.8462	5.9	5.3	13
259	Surg	SUBTOTAL MASTECTOMY FOR MALIGNANCY WITH CC	1.0046	7.4	5.2	23
260	Surg	SUBTOTAL MASTECTOMY FOR MALIGNANCY W/O CC	.6010	3.6	3.0	11
261	Surg	BREAST PROC FOR NON-MALIGNANCY EXCEPT BIOPSY & LOCAL EXCISION	.6204	3.3	2.7	9
262	Surg	BREAST BIOPSY & LOCAL EXCISION FOR NON-MALIGNANCY	.4312	2.4	2.0	6
263	Surg	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS WITH CC	2.5967	20.8	15.3	33
264	Surg	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W/O CC	1.6179	14.7	10.8	29
265	Surg	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W CC	1.3909	10.5	6.8	25
266	Surg	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W/O CC	.6865	4.9	3.4	19
267	Surg	PERIANAL & PILONIDAL PROCEDURES	.6248	4.6	3.4	15
268	Surg	SKIN, SUBCUTANEOUS TISSUE & BREAST PLASTIC PROCEDURES	.5934	3.5	2.4	12
269		OTHER SKIN, SUBCUT TISS & BREAST PROCEDURE WITH CC	1.5177	11.5	7.6	26
270		OTHER SKIN, SUBCUT TISS & BREAST PROCEDURE W/O CC	.6834	4.9	3.4	18
271	Med	SKIN ULCERS	1.2017	11.5	8.7	27
272	Med	MAJOR SKIN DISORDERS WITH CC	1.0375	9.7	7.4	25
273	Med	MAJOR SKIN DISORDERS W/O CC	.7247	7.9	6.0	24
274	Med	MALIGNANT BREAST DISORDERS WITH CC	1.0494	9.9	6.4	24
275	Med	MALIGNANT BREAST DISORDERS W/O CC	.6395	6.1	3.8	22
276	Med	NON-MALIGANT BREAST DISORDERS	.5245	4.3	2.9	16
277	Med	CELLULITIS AGE >17 WITH CC	.9695	8.8	7.2	25
278	Med	CELLULITIS AGE >17 W/O CC	.7063	6.9	5.8	19
279	Med	CELLULITIS AGE 0-17	.7367	5.4	4.6	16
280	Med	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 WITH CC	.6197	6.1	4.5	22
281	Med	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W/O CC	.4306	4.5	3.4	16
282	Med	* TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE 0-17	.3424		2.2	9
283	Med	MINOR SKIN DISORDERS WITH CC	.7682	7.3	5.5	24
284	Med	MINOR SKIN DISORDERS W/O CC	.4795	5.1	3.7	18
		MDC 10 - Endocrine, Nutritional and Metabolic Diseases and Disorders (DRGs 285-301)				
285	Surg	AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT,& METABOL DISORDERS	2.9919	23.4	17.5	36
286	Surg	ADRENAL & PITUITARY PROCEDURES	2.7063	14.5	12.0	30
287	Surg	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DISORDERS	2.2274	19.0	13.8	32
288	Surg	O.R. PROCEDURES FOR OBESITY	2.0018	11.2	8.2	26
289	Surg	PARATHYROID PROCEDURES	1.1470	6.9	5.4	20
290	Surg	THYROID PROCEDURES	.8428	4.9	4.0	13
291	Surg	THYROGLOSSAL PROCEDURES	.4991	2.8	2.3	8
292	Surg	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC WITH CC	2.6027	17.1	12.0	30
293	Surg	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W/O CC	1.1698	8.9	6.2	24

See footnotes at end of table.

Table 71—Continued

Diagnosis-related groups (DRGs), relative weighting factors, geometric mean length of stay, and length of stay (LOS) outlier cutoff points used in the prospective payment system: Fiscal year 1988

DRG codes	Status	Description	Relative weights	Arithmetic mean LOS	Geometric mean LOS	Outlier threshold
294	Med	DIABETES AGE >35	.7493	7.4	6.1	21
295	Med	DIABETES AGE 0-35	.7728	5.7	4.5	19
296	Med	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 WITH CC	.9259	8.0	6.0	24
297	Med	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 W/O CC	.5791	5.6	4.5	17
298	Med	NUTRITIONAL & MISC METABOLIC DISORDERS AGE 0-17	.7065	5.2	3.2	20
299	Med	INBORN ERRORS OF METABOLISM	.8271	6.9	4.7	23
300	Med	ENDOCRINE DISORDERS WITH CC	1.0862	9.1	6.9	25
301	Med	ENDOCRINE DISORDERS W/O CC	.6758	6.3	4.7	22
		MDC 11 - Diseases and Disorders of the Kidney and Urinary Tract (DRGs 302-333)				
302	Surg	KIDNEY TRANSPLANT	3.8463	19.1	16.5	35
303	Surg	KIDNEY,URETER & MAJOR BLADDER PROCEDURES FOR NEOPLASM	2.7747	15.0	12.8	31
304	Surg	KIDNEY,URETER & MAJOR BLADDER PROC FOR NON-NEOPL WITH CC	2.3651	13.5	10.3	28
305	Surg	KIDNEY,URETER & MAJOR BLADDER PROC FOR NON-NEOPL W/O CC	1.3665	8.0	6.2	24
306	Surg	PROSTATECTOMY WITH CC	1.4376	10.1	8.2	26
307	Surg	PROSTATECTOMY W/O CC	.9121	6.6	5.6	17
308	Surg	MINOR BLADDER PROCEDURES WITH CC	1.534	10.2	7.3	25
309	Surg	MINOR BLADDER PROCEDURES W/O CC	.8620	5.9	4.3	22
310	Surg	TRANSURETHRAL PROCEDURES WITH CC	.9026	6.2	4.6	22
311	Surg	TRANSURETHRAL PROCEDURES W/O CC	.5681	3.6	2.9	11
312	Surg	URETHRAL PROCEDURES, AGE >17 WITH CC	.8246	6.0	4.4	21
313	Surg	URETHRAL PROCEDURES, AGE >17 W/O CC	.5286	3.7	2.8	12
314	Surg	* URETHRAL PROCEDURES, AGE 0-17	.4323		2.3	11
315	Surg	OTHER KIDNEY & URINARY TRACT O.R. PROCEDURES	2.3635	13.0	8.2	26
316	Med	RENAL FAILURE	1.2840	9.1	6.2	24
317	Med	ADMIT FOR RENAL DIALYSIS	.3542	2.4	1.8	7
318	Med	KIDNEY & URINARY TRACT NEOPLASMS WITH CC	1.0441	9.1	6.0	24
319	Med	KIDNEY & URINARY TRACT NEOPLASMS W/O CC	.5777	4.9	3.2	19
320	Med	KIDNEY & URINARY TRACT INFECTIONS AGE >17 WITH CC	1.0230	8.4	6.8	25
321	Med	KIDNEY & URINARY TRACT INFECTIONS AGE >17 W/O CC	.7316	6.5	5.5	18
322	Med	KIDNEY & URINARY TRACT INFECTIONS AGE 0-17	.6829	5.0	4.3	14
323	Med	URINARY STONES WITH CC, &/OR ESW LITHOTRIPSY	.7020	4.9	3.6	16
324	Med	URINARY STONES W/O CC	.5139	3.1	2.4	9
325	Med	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 WITH CC	.6789	6.0	4.5	20
326	Med	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 W/O CC	.4553	4.1	3.2	13
327	Med	* KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE 0-17	.5511		3.3	21
328	Med	URETHRAL STRICTURE AGE >17 WITH CC	.6266	5.1	3.9	18
329	Med	URETHRAL STRICTURE AGE >17 W/O CC	.4431	3.5	2.6	12
330	Med	* URETHRAL STRICTURE AGE 0-17	.2788		1.6	5
331	Med	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >17 WITH CC	.9050	7.5	5.3	23
332	Med	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >17 W/O CC	.5913	5.0	3.6	18
333	Med	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE 0-17	.6887	4.7	3.4	19
		MDC 12 - Diseases and Disorders of the Male Reproductive System (DRGs 334-352)				
334	Surg	MAJOR MALE PELVIC PROCEDURES W CC	1.9237	12.8	11.6	28
335	Surg	MAJOR MALE PELVIC PROCEDURES W/O CC	1.4080	10.0	9.4	19

Table 71—Continued

Diagnosis-related groups (DRGs), relative weighting factors, geometric mean length of stay, and length of stay (LOS) outlier cutoff points used in the prospective payment system: Fiscal year 1988

DRG codes	Status	Description	Relative weights	Arithmetic mean LOS	Geometric mean LOS	Outlier threshold
336	Surg	TRANSURETHRAL PROSTATECTOMY WITH CC	1.0774	7.7	6.6	19
337	Surg	TRANSURETHRAL PROSTATECTOMY W/O CC	.7505	5.4	5.0	11
338	Surg	TESTES PROCEDURES, FOR MALIGNANCY	.7865	5.6	3.5	22
339	Surg	TESTES PROCEDURES, NON-MALIGNANCY AGE >17	.5930	3.8	2.8	13
340	Surg	* TESTES PROCEDURES, NON-MALIGNANCY AGE 0-17	.4335		2.4	7
341	Surg	PENIS PROCEDURES	1.0294	5.2	4.3	15
342	Surg	CIRCUMCISION AGE >17	.4494	2.8	2.1	8
343	Surg	* CIRCUMCISION AGE 0-17	.3788		1.7	4
344	Surg	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROCEDURES FOR MALIGNANCY	1.1302	7.4	5.7	24
345	Surg	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXCEPT FOR MALIGNANCY	.8284	5.9	4.3	21
346	Med	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, WITH CC	.9360	8.5	5.7	24
347	Med	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W/O CC	.5091	4.0	2.7	14
348	Med	BENIGN PROSTATIC HYPERTROPHY WITH CC	.6588	5.4	3.8	20
349	Med	BENIGN PROSTATIC HYPERTROPHY W/O CC	.4059	3.0	2.3	9
350	Med	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM	.6734	5.8	4.8	16
351	Med	* STERILIZATION, MALE	.3333		1.6	5
352	Med	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES	.4886	3.9	2.9	14
		MDC 13 - Diseases and Disorders of the Female Reproductive System (DRGs 353-369)				
353	Surg	PELVIC EVISCERATION, RADICAL HYSTERECTOMY & RADICAL VULVECTOMY	2.2997	15.2	12.8	31
354	Surg	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG WITH CC	1.5482	10.2	9.1	23
355	Surg	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W/O CC	.9929	7.1	6.7	13
356	Surg	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES	.7983	6.3	5.7	14
357	Surg	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIG	2.1591	13.2	11.4	29
358	Surg	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY WITH CC	1.2941	9.0	8.1	20
359	Surg	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC	.9025	6.6	6.3	12
360	Surg	VAGINA, CERVIX & VULVA PROCEDURES	.6957	5.2	3.6	19
361	Surg	LAPAROSCOPY & INCISIONAL TUBAL INTERRUPTION	.6442	3.9	2.7	13
362	Surg	ENDOSCOPIC TUBAL INTERRUPTION	.4095	2.0	1.7	5
363	Surg	D&C, CONIZATION & RADIO-IMPLANT, FOR MALIGNANCY	.6597	4.9	3.5	16
364	Surg	D&C, CONIZATION EXCEPT FOR MALIGNANCY	.4262	2.8	2.2	8
365	Surg	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES	1.9060	12.7	9.6	28
366	Med	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM WITH CC	1.0916	9.6	6.1	24
367	Med	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W/O CC	.5481	4.9	3.2	18
368	Med	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM	.8308	7.2	5.7	22
369	Med	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS	.4920	4.6	3.3	17
		MDC 14 - Pregnancy, Childbirth and the Puerperium (DRGs 370-384)				
370	Surg	CESAREAN SECTION W CC	1.0303	7.7	6.5	19
371	Surg	CESAREAN SECTION W/O CC	.7164	5.2	5.0	9
372	Med	VAGINAL DELIVERY W COMPLICATING DIAGNOSES	.4927	4.3	3.4	12
373	Med	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	.3212	2.7	2.4	6
374	Surg	VAGINAL DELIVERY W STERILIZATION &/OR D&C	.5614	3.5	3.1	7
375	Surg	* VAGINAL DELIVERY W O.R. PROC EXCEPT STERIL &/OR D&C	.6817		4.4	15

See footnotes at end of table.

Table 71—Continued

Diagnosis-related groups (DRGs), relative weighting factors, geometric mean length of stay, and length of stay (LOS) outlier cutoff points used in the prospective payment system: Fiscal year 1988

DRG codes	Status		Description	Relative weights	Arithmetic mean LOS	Geometric mean LOS	Outlier threshold
376	Med		POSTPARTUM & POST ABORTION DIAGNOSES W/O O.R. PROCEDURE	.3520	3.3	2.5	11
377	Surg		POSTPARTUM & POST ABORTION DIAGNOSES W O.R. PROCEDURE	.9882	4.7	2.9	21
378	Med		ECTOPIC PREGNANCY	.7787	4.4	4.2	9
379	Med		THREATENED ABORTION	.2843	2.8	2.1	9
380	Med		ABORTION W/O D&C	.3124	2.5	1.9	8
381	Surg		ABORTION W D&C, ASPIRATION CURETTAGE OR HYSTEROTOMY	.3694	1.9	1.6	5
382	Med		FALSE LABOR	.1309	1.3	1.2	2
383	Med		OTHER ANTEPARTUM DIAGNOSES W MEDICAL COMPLICATIONS	..3964	4.6	3.3	17
384	Med		OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS	.3512	3.7	2.6	13
			MDC 15 - Newborns and Other Neonates with Conditions Originating in the Perinatal Period (DRGs 385-391)				
385			NEONATES, DIED OR TRANSFERRED TO ANOTHER ACUTE CARE FACILITY	1.2232	8.4	3.7	22
386		*	EXTREME IMMATURITY OR RESPIRATORY DISTRESS SYNDROME, NEONATE	3.6480		17.9	36
387		*	PREMATURITY W MAJOR PROBLEMS	1.8267		13.3	31
388		*	PREMATURITY W/O MAJOR PROBLEMS	1.1571		8.6	27
389			FULL TERM NEONATE W MAJOR PROBLEMS	1.4127	10.7	7.4	25
390			NEONATE W OTHER SIGNIFICANT PROBLEMS	.9416	6.0	4.2	20
391		*	NORMAL NEWBORN	.2218		3.1	7
			MDC 16 - Diseases and Disorders of the Blood and Blood Forming Organs and Immunological Disorders (DRGs 392-399)				
392	Surg		SPLENECTOMY AGE >17	3.5252	16.4	12.8	31
393	Surg	*	SPLENECTOMY AGE 0-17	1.5206		9.1	27
394	Surg		OTHER O.R. PROCEDURES OF THE BLOOD AND BLOOD FORMING ORGANS	1.2250	7.9	4.8	23
395	Med		RED BLOOD CELL DISORDERS AGE >17	.7264	6.0	4.4	22
396	Med		RED BLOOD CELL DISORDERS AGE 0-17	.3441	2.4	1.7	7
397	Med		COAGULATION DISORDERS	1.0145	7.5	5.5	23
398	Med		RETICULOENDOTHELIAL & IMMUNITY DISORDERS WITH CC	1.2115	8.7	6.4	24
399	Med		RETICULOENDOTHELIAL & IMMUNITY DISORDERS W/O CC	.6830	5.6	3.9	21
			MDC 17 - Myeloproliferative Diseases and Disorders, and Poorly Differentiated Neoplasms (DRGs 400-414, 473)				
400	Surg		LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE	2.6900	15.3	11.2	29
401	Surg		LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W CC	2.0871	14.5	9.9	28
402	Surg		LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W/O CC	.9252	6.6	4.6	23
403	Med		LYMPHOMA & NON-ACUTE LEUKEMIA W CC	1.5222	11.6	7.9	26
404	Med		LYMPHOMA & NON-ACUTE LEUKEMIA W/O CC	.8085	7.0	4.8	23
405		*	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE AGE 0-17	1.0407		4.9	23
406	Surg		MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R.PROC W CC	2.7146	16.5	12.5	30
407	Surg		MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R.PROC W/O CC	1.4499	9.5	7.4	25
408	Surg		MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R.PROC	.8955	6.4	4.2	22
409	Med		RADIOTHERAPY	1.0802	10.6	7.1	25
410	Med		CHEMOTHERAPY	.4742	3.1	2.4	10
411	Med		HISTORY OF MALIGNANCY W/O ENDOSCOPY	.4919	3.9	2.9	13
412	Med		HISTORY OF MALIGNANCY W ENDOSCOPY	.3954	2.7	2.0	8
413	Med		OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG WITH CC	1.2385	10.7	7.1	25
414	Med		OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W/O CC	.8128	7.8	5.1	23

See footnotes at end of table.

Table 71—Continued

Diagnosis-related groups (DRGs), relative weighting factors, geometric mean length of stay, and length of stay (LOS) outlier cutoff points used in the prospective payment system: Fiscal year 1988

DRG codes	Status	Description	Relative weights	Arithmetic mean LOS	Geometric mean LOS	Outlier threshold
473		ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE AGE >17	2.7107	14.8	8.3	26
		MDC 18 - Infectious and Parasitic Diseases (Systemic or Unspecified Sites) (DRGs 415-423)				
415	Surg	O.R. PROCEDURE FOR INFECTIOUS & PARASITIC DISEASES	3.5067	19.9	14.5	32
416	Med	SEPTECEMIA AGE >17	1.5894	10.4	7.4	25
417	Med	SEPTECEMIA AGE 0-17	.9346	6.5	5.0	21
418	Med	POSTOPERATIVE & POST-TRAUMATIC INFECTIONS	.9743	8.5	6.7	25
419	Med	FEVER OF UNKNOWN ORIGIN AGE >17 WITH CC	.9778	7.6	5.9	24
420	Med	FEVER OF UNKNOWN ORIGIN AGE >17 W/O CC	.6949	5.8	4.7	17
421	Med	VIRAL ILLNESS AGE >17	.6255	5.5	4.4	16
422	Med	VIRAL ILLNESS & FEVER OF UNKNOWN ORIGIN AGE 0-17	.6274	5.0	3.4	18
423	Med	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES	1.5333	11.2	8.0	26
		MDC 19 - Mental Diseases and Disorders (DRGs 424-432)				
424	Surg	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS	2.2176	211.6	12.2	30
425	Med	ACUTE ADJUST REACT & DISTURBANCES OF PSYCHOSOCIAL DYSFUNCTION	.6004	6.0	4.3	21
426	Med	DEPRESSIVE NEUROSES	.6580	8.3	6.0	24
427	Med	NEUROSES EXCEPT DEPRESSIVE	.6315	8.2	5.6	24
428	Med	DISORDERS OF PERSONALITY & IMPULSE CONTROL	.7305	9.8	6.1	24
429	Med	ORGANIC DISTURBANCES & MENTAL RETARDATION	.8868	10.6	7.1	25
430	Med	PSYCHOSES	.9329	13.0	8.8	27
431	Med	CHILDHOOD MENTAL DISORDERS	.7134	8.3	5.8	24
432	Med	OTHER MENTAL DISORDER DIAGNOSES	.7097	7.0	4.3	22
		MDC 20 - Alcohol/Drug Use and Alcohol/Drug Induced Organic Mental Disorders (DRGs 433-437)				
433		ALCOHOL/DRUG ABUSE OR DEPENDENCE, LEFT AMA	.4232	5.0	3.2	20
434		ALC/DRUG ABUSE OR DEPENDENCE, DETOX OR OTHER SYMPT TRT WITH CC	.8149	8.3	5.9	24
435		ALC/DRUG ABUSE OR DEPENDENCE, DETOX OR OTHER SYMPT TRT W/O CC	.5903	7.5	5.0	23
436		ALC/DRUG DEPENDENCE W REHABILITATION THERAPY	.9788	13.6	9.1	27
437		ALC/DRUG DEPENDENCE, COMBINED REHAB & DETOX THERAPY	1.3306	17.6	13.7	32
438		NO LONGER VALID	.0000		.0	0
		MDC 21 - Injuries, Poisonings and Toxic Effect of Drugs (DRGs439-455)				
439	Surg	SKIN GRAFTS FOR INJURIES	1.7523	12.9	7.2	25
440	Surg	WOUND DEBRIDEMENTS FOR INJURIES	2.2498	15.6	9.6	28
441	Surg	HAND PROCEDURES FOR INJURIES	.7185	3.8	2.4	14
442	Surg	OTHER O.R. PROCEDURES FOR INJURIES WITH CC	1.9218	9.9	5.9	24
443	Surg	OTHER O.R. PROCEDURES FOR INJURIES W/O CC	1.2169	6.9	4.3	22
444	Med	MULTIPLE TRAUMA AGE >17 WITH CC	.8207	7.3	5.3	23
445	Med	MULTIPLE TRAUMA AGE >17 W/O CC	.5183	5.0	3.7	17
446	Med	* MULTIPLE TRAUMA AGE 0-17	.4796		2.4	10
447	Med	ALLERGIC REACTIONS AGE >17	.4703	3.6	2.7	12
448	Med	* ALLERGIC REACTIONS AGE 0-17	.3470		2.9	9
449	Med	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 WITH CC	.7922	6.1	4.5	22
450	Med	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W/O CC	.4917	4.1	3.0	14

See footnotes at end of table.

Table 71—Continued

Diagnosis-related groups (DRGs), relative weighting factors, geometric mean length of stay, and length of stay (LOS) outlier cutoff points used in the prospective payment system: Fiscal year 1988

DRG codes	Status	Description	Relative weights	Arithmetic mean LOS	Geometric mean LOS	Outlier threshold
451	Med	POISONING & TOXIC EFFECTS OF DRUGS AGE 0-17	.5907	4.4	3.4	14
452	Med	COMPLICATIONS OF TREATMENT WITH CC	.8976	6.7	4.6	23
453	Med	COMPLICATIONS OF TREATMENT W/O CC	.5137	4.6	3.3	17
		MDC 21 - Injuries, Poisonings and Toxic Effect of Drugs (DRGs 439-455)				
454	Med	OTHER INJURY, POISONING & TOXIC EFF DIAG WITH CC	.9067	6.8	4.5	22
455	Med	OTHER INJURY, POISONING & TOXIC EFF DIAG W/O CC	.4692	4.0	2.9	14
		MDC 22 - Burns (DRGs 456-460, 472)				
456		BURNS, TRANSFERRED TO ANOTHER ACUTE CARE FACILITY	1.9811	10.1	4.6	23
457	Med	EXTENSIVE BURNS W/O O.R. PROCEDURE	2.5317	8.5	4.1	22
458	Surg	NON-EXTENSIVE BURNS W SKIN GRAFT	3.7113	22.8	16.1	34
459	Surg	NON-EXTENSIVE BURNS W WOUND DEBRIDEMENT OR OTHER O.R. PROC	1.7964	14.6	10.0	28
460	Med	NON-EXTENSIVE BURNS W/O O.R. PROCEDURE	1.0495	5.2	6.4	24
472	Surg	EXTENSIVE BURNS W O.R. PROCEDURE	10.7296	29.6	17.1	35
		MDC 23 - Factors Influencing Health Status and Other Contacts with Health Services (DRGs 461-467)				
461	Surg	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES	.7198	4.4	2.4	17
462	Med	REHABILITATION	1.7517	18.3	13.7	32
463	Med	SIGNS & SYMPTOMS W CC	.7633	7.0	5.3	23
464	Med	SIGNS & SYMPTOMS W/O CC	.4740	4.5	3.4	15
465	Med	AFTERCARE W HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	.3172	2.2	1.8	6
466	Med	AFTERCARE W/O HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	.5383	5.0	2.8	20
467	Med	OTHER FACTORS INFLUENCING HEALTH STATUS	.4723	6.8	2.9	21
		DRGs not assigned to an MDC				
468		EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	2.4679	15.5	9.9	28
469		** PRINCIPAL DIAGNOSIS INVALID AS DISCHARGE DIAGNOSIS	.0000		.0	0
470		** UNGROUPABLE	.0000		.0	0

* Medicare data have been supplemented by data from Maryland and Michigan for low volume DRGs.
** DRGs 469 and 470 contain cases which could not be assigned to valid DRGs.

NOTES: Geometric mean is used only to determine payment for outlier and transfer cases. Relative weights are based on Medicare patient data and may not be appropriate for other patients.

SOURCE: Department of Health and Human Services, Health Care Financing Administration; Federal Register. Tuesday, September 1, 1987.

Appendix C
Selected DRG statistics for all short-stay hospitals: Calendar year 1988

Table 72

Utilization and expenditures for all Medicare short-stay hospital discharges, by diagnosis-related groups (DRGs): Calendar year 1988

DRG number 1/	Utilization		Total expenditures in thousands 2/	Medicare program payments in thousands			Beneficiary cost-sharing in thousands 6/	Average expenditures		
	Number of discharges	Average length of stay		Total 3/	DRG amount			Total	Medicare program payment	Beneficiary cost-sharing
					Direct 4/	Passthrough 5/				
Total	10,256,945	8.9	$51,510,260	$46,895,329	$39,741,686	$7,153,643	$4,614,931	$5,022	$4,572	$450
001	27,010	19.0	406,087	390,407	330,969	59,438	15,680	15,035	14,454	581
002	5,750	19.2	97,882	94,293	81,090	13,203	3,589	17,023	16,399	624
004	4,970	16.8	56,079	53,129	43,830	9,299	2,950	11,243	10,650	593
005	47,530	7.8	277,513	257,608	223,985	33,623	19,905	5,839	5,420	419
006	1,555	3.2	2,778	2,034	1,662	372	744	1,787	1,309	478
007	5,945	25.4	81468	74,212	61,719	12,493	7,256	13,704	12,483	1,221
008	3,950	5.3	12,286	10,406	8,461	1,945	1,880	3,110	2,634	476
009	2,570	14.4	17,180	15,515	13,451	2,064	1,665	6,685	6,037	648
010	18,375	11.6	96,647	86,616	68,915	17,701	8,031	5,151	4,714	437
011	4,785	7.2	14,776	12,926	10,340	2,586	1,850	3,088	2,701	387
012	28,840	13.4	143,167	128,629	109,426	19,203	14,538	4,964	4,460	504
013	5,845	10.4	23,105	20,246	15,531	4,715	2,859	3,953	3,464	489
014	328,900	10.9	1,624,625	1,463,108	1,211,724	251,384	161,517	4,940	4,448	491
015	150,395	5.7	363,535	294,730	237,305	57,425	68,805	2,417	1,960	457
016	13,295	9.6	56,707	50,887	41,482	9,405	5,820	4,265	3,828	438
017	5,175	7.0	12,699	10,408	8,045	2,363	2,291	2,454	2,011	443
018	13,020	9.2	53,045	46,557	36,747	9,810	6,488	4,074	3,576	498
019	9,710	6.1	24,728	20,429	15,909	4,520	4,299	2,547	2,104	443
020	5,970	12.6	40,366	37,424	30,726	6,698	2,942	6,761	6,269	493
021	790	10.7	4,679	4,320	3,397	923	359	5,923	5,468	455
022	11,925	5.7	29,417	24,011	19,370	4,641	5,406	2,467	2,014	453
023	4,190	6.3	13913	12,376	10,476	1,900	1,537	3,320	2,954	367
024	50,205	7.8	187,857	165,946	136,027	29,919	21,911	3,742	3,305	436
025	26,355	4.8	55,193	43,672	34,392	9,280	11,521	2,094	1,657	437
026	50	3.6	143	129	101	28	14	2,858	2,588	270
027	2,865	9.2	18,611	17,049	14,771	2,278	1,562	6,496	5,951	545
028	7,505	9.9	36,273	32,726	26,931	5,795	3,547	4,833	4,361	473
029	4,140	5.4	9,426	7,550	6,180	1,370	1,876	2,277	1,824	453
031	4,150	6.7	10,125	8,249	6,684	1,565	1,876	2,440	1,988	452
032	4,300	3.7	5,987	4,044	3,192	852	1,943	1,392	940	452
034	12,780	9.7	63,908	58,299	48,959	9,340	5,609	5,001	4,562	439
035	5,405	6.3	14,259	11,891	9,860	2,031	2,368	2,638	2,200	438
036	21,830	3.0	58,333	48,302	39,450	8,852	10,031	2,672	2,213	459
037	3,165	4.5	9,470	7,969	6,381	1,588	1,501	2,992	2,518	474
038	1,280	3.0	2,112	1,566	1,137	429	546	1,649	1,223	427
039	26,655	2.0	55,647	42,523	35,950	6,573	13,124	2,088	1,595	492
040	4,920	3.3	10,709	8,388	6,593	1,795	2,321	2,176	1,705	472

See footnotes at end of table.

Table 72—Continued

Utilization and expenditures for all Medicare short-stay hospital discharges, by diagnosis-related groups (DRGs): Calendar year 1988

DRG number 1/	Utilization		Total expenditures in thousands 2/	Medicare program payments in thousands			Beneficiary cost-sharing in thousands 6/	Average expenditures		
	Number of discharges	Average length of stay		Total 3/	DRG amount			Total	Medicare program payment	Beneficiary cost-sharing
					Direct 4/	Passthrough 5/				
042	24,675	3.0	$68,088	$55,990	$45,317	$10,673	$12,098	$2,759	$2,269	$490
043	320	4.1	492	331	200	131	161	1,536	1,033	504
044	2,295	6.8	6,400	5,327	3,654	1,673	1,073	2,789	2,321	467
045	3,120	4.3	6,770	5,292	4,192	1,100	1,478	2,170	1,696	474
046	3,200	6.1	8,438	7,108	5,582	1,526	1,330	2,637	2,221	416
047	2,975	4.3	4,604	3,315	2,434	881	1,289	1,547	1,114	433
049	6,295	16.2	81,257	77,676	65,343	12,333	3,581	12,908	12,339	569
050	5,710	3.0	14,254	11,382	9,686	1,696	2,872	2,496	1,993	503
051	800	2.7	1,616	1,206	1,027	179	410	2,021	1,508	513
052	120	2.7	370	318	276	42	52	3,085	2,654	431
053	8,910	3.3	22,170	17,678	14,525	3,153	4,492	2,488	1,984	504
055	7,335	2.7	14,743	11,180	9,094	2,086	3,563	2,010	1,524	486
056	1,425	2.2	2,324	1,668	1,394	274	656	1,631	1,171	460
057	860	5.6	2,700	2,292	1,885	407	408	3,140	2,666	474
059	330	3.7	666	501	431	70	165	2,017	1,518	499
061	355	4.4	1,013	846	696	150	167	2,856	2,384	472
063	4,825	8.5	25,995	23,327	19,357	3,970	2,668	5,388	4,835	553
064	5,525	10.2	28,127	25,433	20,906	4,527	2,694	5,091	4,603	488
065	30,830	4.2	52,044	37,707	29,379	8,328	14,337	1,688	1,223	465
066	10,060	4.3	16,729	12,367	9,367	3,000	4,362	1,663	1,229	434
067	480	6.2	1,717	1,458	1,254	204	259	3,576	3,036	540
068	17,310	6.2	44,902	37,068	30,150	6,918	7,834	2,594	2,141	453
069	7,100	4.8	12,566	9,280	7,229	2,051	3,286	1,770	1,307	463
070	45	5.2	119	105	68	37	14	2,635	2,335	300
071	140	7.6	461	404	308	96	57	3,295	2,891	404
072	920	5.5	2,061	1,650	1,378	272	411	2,241	1,794	447
073	8,570	6.2	25,268	21,449	17,072	4,377	3,819	2,948	2,503	446
075	30,430	14.9	358,201	344,253	298,932	45,321	13,948	11,771	11,313	458
076	30,320	13.9	270,157	255,011	219,408	35,603	15,146	8,910	8,411	500
077	4,910	7.3	21,399	19,310	15,990	3,320	2,089	4,358	3,933	425
078	27,250	10.6	145,395	135,863	114,222	21,641	9,532	5,336	4,986	350
079	101,885	12.6	787,348	741,052	637,654	103,398	46,296	7,728	7,273	454
080	16,205	9.2	74,773	67,699	56,860	10,839	7,074	4,614	4,178	437

See footnotes at end of table.

Table 72—Continued

Utilization and expenditures for all Medicare short-stay hospital discharges, by diagnosis-related groups (DRGs): Calendar year 1988

DRG number 1/	Utilization		Total expenditures in thousands 2/	Medicare program payments in thousands			Beneficiary cost-sharing in thousands 6/	Average expenditures		
	Number of discharges	Average length of stay		Total 3/	DRG amount			Total	Medicare program payment	Beneficiary cost-sharing
					Direct 4/	Passthrough 5/				
081	20	23.8	$205	$181	$131	$50	$24	$10,249	$9,067	$1,181
082	77,030	9.7	361,756	332,178	274,968	57,210	29,578	4,696	4,312	384
083	7,975	8.0	26,304	22,715	18,576	4,139	3,589	3,298	2,848	450
084	2,355	4.8	4,231	3,203	2,494	709	1,028	1,797	1,360	436
085	15,740	9.3	68,347	62,321	51,064	11,257	6,026	4,342	3,959	383
086	2,565	6.0	7,207	6,254	5,066	1,188	953	2,810	2,438	371
087	68,265	8.7	373,353	345,792	301,825	43,967	27,561	5,469	5,065	404
088	92,275	7.8	373,386	336,579	282,794	53,785	36,807	4,046	3,648	399
089	322,675	9.2	1,490,145	1,346,969	1,137,006	209,963	143,176	4,618	4,174	444
090	83,085	6.9	254,247	215,913	178,225	37,688	38,334	3,060	2,599	461
091	130	6.3	485	426	345	81	59	3,730	3,274	456
092	8,400	9.4	40,836	37,381	31,231	6,150	3,455	4,861	4,450	411
093	2,200	7.1	6,551	5,626	4,424	1,202	925	2,977	2,557	421
094	9,270	9.7	45,422	41,525	35,014	6,511	3,897	4,900	4,480	420
095	1,770	5.9	4,750	3,980	3,194	786	770	2,683	2,248	435
096	215,125	7.4	747,718	656,151	549,888	106,263	91,567	3,476	3,050	426
097	51,325	5.5	129,923	107,325	87,796	19,529	22,598	2,531	2,091	440
099	36,975	6.1	107,348	92,478	76,727	15,751	14,870	2,903	2,501	402
100	11,870	3.5	21,506	16,405	13,553	2,852	5,101	1,812	1,382	430
101	20,995	7.4	74,199	65,893	55,168	10,725	8,306	3,534	3,138	396
102	6,395	5.1	14,670	11,915	9,701	2,214	2,755	2,294	1,863	431
103	160	31.4	7,170	7,009	5,768	1,241	161	44,818	43,810	1,008
104	12,015	23.6	375,903	369,127	322,279	46,848	6,776	31,286	30,722	564
105	12,010	16.4	297,138	292,555	254,543	38,012	4,583	24,741	24,359	382
106	61,815	16.8	1,324,447	1,297,959	1,147,512	150,447	26,488	21,426	20,997	429
107	44,790	13.0	766,552	755,116	658,523	96,593	11,436	17,114	16,859	255
108	5,415	16.9	131,229	129,045	117,481	11,564	2,184	24,234	23,831	403
109	11,415	12.4	187,449	182,543	158,791	23,752	4,906	16,421	15,992	430
110	69,685	16.4	1,020,260	982,478	864,666	117,812	37,782	14,641	14,099	542
111	17,925	9.4	146,694	139,026	121,898	17,128	7,668	8,184	7,756	428
112	109,830	7.5	815,069	774,629	678,244	96,385	40,440	7,421	7,053	368
113	32,725	19.2	326,091	306,130	256,052	50,078	19,961	9,965	9,355	610
114	8,755	13.8	60,255	56,101	46,312	9,789	4,154	6,882	6,408	475
115	6,235	14.8	93,460	90,678	81,661	9,017	2,782	14,990	14,543	446
116	52,065	7.9	517,212	494,386	452,167	42,219	22,826	9,934	9,496	438
117	4,075	6.5	21,716	19,971	17,666	2,305	1,745	5,329	4,901	428
118	9,215	5.5	66,479	62,084	56,902	5,182	4,395	7,214	6,737	477
119	4,275	6.3	14,143	12,068	9,978	2,090	2,075	3,308	2,823	485
120	21,855	17.1	248,485	235,277	201,064	34,213	13,208	11,370	10,765	604

See footnotes at end of table.

Table 72—Continued

Utilization and expenditures for all Medicare short-stay hospital discharges, by diagnosis-related groups (DRGs): Calendar year 1988

DRG number 1/	Utilization			Medicare program payments in thousands				Average expenditures		
	Number of discharges	Average length of stay	Total expenditures in thousands 2/	Total 3/	DRG amount		Beneficiary cost-sharing in thousands 6/	Total	Medicare program payment	Beneficiary cost-sharing
					Direct 4/	Passthrough 5/				
121	142,240	10.5	$843,880	$785,856	$669,653	$116,203	$58,024	$5,933	$5,525	$408
122	125,535	7.5	488,097	437,164	368,937	68,227	50,933	3,888	3,482	406
123	65,765	5.4	341,542	313,395	283,100	30,295	28,147	5,193	4,765	428
124	89,615	6.3	405,641	372,145	312,058	60,087	33,496	4,526	4,153	374
125	107,560	3.1	276,398	233,598	197,159	36,439	42,800	2,570	2,172	398
126	3,785	22.7	45,400	43,365	35,871	7,494	2,035	11,995	11,457	538
127	537,875	8.1	2,084,093	1,865,674	1,551,605	314,069	218,419	3,875	3,469	406
128	30,725	8.8	96,602	83,966	66,643	17,323	12,636	3,144	2,733	411
129	8,325	5.4	47,907	44,477	40,351	4,126	3,430	5,755	5,343	412
130	60,855	8.2	213,409	188,483	149,162	39,321	24,926	3,507	3,097	410
131	30,280	5.9	69,698	57,115	43,639	13,476	12,583	2,302	1,886	416
132	16,705	5.9	48,486	41,928	34,600	7,328	6,558	2,903	2,510	393
133	6,715	4.2	13,739	11,006	9,063	1,943	2,733	2,046	1,639	407
134	36,265	5.7	85,008	68,444	54,874	13,570	16,564	2,344	1,887	457
135	7,305	7.2	26,344	23,327	19,005	4,322	3,017	3,606	3,193	413
136	1,835	4.3	4,016	3,290	2,702	588	726	2,189	1,793	396
138	174,970	6.4	559,945	487,225	404,235	82,990	72,720	3,200	2,785	416
139	79,735	4.3	173,860	138,931	114,301	24,630	34,929	2,180	1,742	438
140	367,585	4.8	859,466	705,572	588,553	117,019	153,894	2,338	1,919	419
141	74,750	5.9	200,203	166,673	134,299	32,374	33,530	2,678	2,230	449
142	40,495	4.2	80,146	61,464	49,394	12,070	18,682	1,979	1,518	461
143	98,670	3.6	195,082	151,828	125,127	26,701	43,254	1,977	1,539	438
144	45,000	7.7	192,376	175,687	147,141	28,546	16,689	4,275	3,904	371
145	8,060	4.4	19,119	16,067	13,406	2,661	3,052	2,372	1,993	379
146	16,975	17.7	216,729	207,253	180,201	27,052	9,476	12,768	12,209	558
147	4,575	10.6	34,483	32,284	27,867	4,417	2,199	7,537	7,057	481
148	117,300	17.4	1,474,274	1,409,573	1,231,652	177,921	64,701	12,568	12,017	552
149	25,450	10.5	168,145	156,367	134,541	21,826	11,778	6,607	6,144	463
150	18,280	14.9	186,374	177,330	154,258	23,072	9,044	10,195	9,701	495
151	6,455	9.2	34,403	31,416	26,589	4,827	2,987	5,330	4,867	463
152	7,440	9.8	44,702	41,486	35,237	6,249	3,216	6,008	5,576	432
153	4,070	7.3	15,804	14,253	11,878	2,375	1,551	3,883	3,502	381
154	48,705	17.7	737,542	709,503	627,108	82,395	28,039	15,143	14,567	576
155	8,395	9.5	55,366	51,620	44,764	6,856	3,746	6,595	6,149	446
157	23,875	7.3	89,068	77,715	63,781	13,934	11,353	3,731	3,255	476
158	19,490	3.6	38,250	28,772	23,562	5,210	9,478	1,963	1,476	486
159	14,170	7.0	59,856	52,900	44,763	8,137	6,956	4,224	3,733	491
160	15,690	4.0	37,200	29,263	24,341	4,922	7,937	2,371	1,865	506

See footnotes at end of table.

Table 72—Continued

Utilization and expenditures for all Medicare short-stay hospital discharges, by diagnosis-related groups (DRGs): Calendar year 1988

DRG number 1/	Utilization		Total expenditures in thousands 2/	Medicare program payments in thousands			Beneficiary cost-sharing in thousands 6/	Average expenditures		
	Number of discharges	Average length of stay		Total 3/	DRG amount			Total	Medicare program payment	Beneficiary cost-sharing
					Direct 4/	Passthrough 5/				
161	32,840	4.8	$89,574	$73,612	61,393	$12,219	$15,962	$2,728	$2,242	$486
162	45,310	2.6	76,580	53,696	44,903	8,793	22,884	1,690	1,185	505
163	20	2.3	71	62	45	17	9	3,535	3,097	439
164	4,450	12.6	38,941	36,643	32,095	4,548	2,298	8,751	8,234	516
165	2,930	7.8	14,408	12,897	11,208	1,689	1,511	4,917	4,402	516
166	2,330	8.4	12,532	11,380	9,786	1,594	1,152	5,378	4,884	495
167	2,785	4.8	7,910	6,507	5,567	940	1,403	2,840	2,336	504
168	4,045	9.0	23,993	22,048	17,670	4,378	1,945	5,931	5,451	481
169	3,920	3.8	10,427	8,542	6,753	1,789	1,885	2,660	2,179	481
170	12,645	16.9	146,894	138,888	118,659	20,229	8,006	11,617	10,984	633
171	2,145	8.5	11,297	10,328	8,888	1,440	969	5,266	4,814	452
172	30,700	10.7	149,978	137,628	111,520	26,108	12,350	4,885	4,483	402
173	4,870	6.4	14,044	12,215	9,932	2,283	1,829	2,884	2,508	376
174	135,980	7.2	501,690	443,487	368,831	74,656	58,203	3,689	3,261	428
175	32,830	4.8	77,561	62,728	51,625	11,103	14,833	2,363	1,911	452
176	11,865	8.0	44,499	39,555	32,453	7,102	4,944	3,751	3,334	417
177	17,980	6.3	50,691	42,664	34,864	7,800	8,027	2,819	2,373	446
178	8,765	4.7	17,462	13,408	10,837	2,571	4,054	1,992	1,530	463
179	7,325	9.8	31,116	27,345	22,023	5,322	3,771	4,248	3,733	515
180	56,285	8.0	197,801	174,405	141,671	32,734	23,396	3,514	3,099	416
181	25,640	5.3	52,907	42,147	32,646	9,501	10,760	2,063	1,644	420
182	241,720	6.4	657,536	555,717	449,326	106,391	101,819	2,720	2,299	421
183	92,745	4.6	173,624	132,843	105,300	27,543	40,781	1,872	1,432	440
184	70	4.0	160	127	90	37	33	2,282	1,810	473
185	4,775	6.6	15,437	13,395	10,946	2,449	2,042	3,233	2,805	428
187	1,690	3.4	3,291	2,538	1,976	562	753	1,948	1,502	446
188	36,590	7.5	135,498	120,512	98,282	22,230	14,986	3,703	3,294	410
189	11,530	4.0	21,282	16,647	13,306	3,341	4,635	1,846	1,444	402
190	180	6.1	715	631	441	190	84	3,971	3,506	465
191	7,170	22.3	144,462	140,277	122,857	17,420	4,185	20,148	19,564	584
192	2,280	23.4	37,058	34,899	29,985	4,914	2,159	16,253	15,306	947
193	9,785	17.9	116,266	111,502	96,296	15,206	4,764	11,882	11,395	487
194	2,185	11.7	14,693	13,832	11,759	2,073	861	6,725	6,331	394
195	24,185	13.7	211,212	199,338	173,231	26,107	11,874	8,733	8,242	491
196	4,100	9.7	23,685	21,842	18,802	3,040	1,843	5,777	5,327	450
197	62,930	10.5	414,862	385,513	334,963	50,550	29,349	6,592	6,126	466
198	39,930	6.5	150,497	131,840	113,025	18,815	18,657	3,769	3,302	467
199	3,200	14.5	27,417	26,023	21,955	4,068	1,394	8,568	8,132	436
200	2,115	14.6	21,193	20,204	17,375	2,829	989	10,020	9,552	46

See footnotes at end of table.

Table 72—Continued

Utilization and expenditures for all Medicare short-stay hospital discharges, by diagnosis-related groups (DRGs): Calendar year 1988

DRG number 1/	Utilization			Medicare program payments in thousands				Average expenditures		
	Number of discharges	Average length of stay	Total expenditures in thousands 2/	Total 3/	DRG amount		Beneficiary cost-sharing in thousands 6/	Total	Medicare program payment	Beneficiary cost-sharing
					Direct 4/	Passthrough 5/				
201	4,790	12.7	$48,143	$46,268	$40,521	$5,747	$1,875	$10,051	$9,659	$391
202	14,530	9.9	68,547	62,539	51,460	11,079	6,008	4,718	4,304	414
203	30,110	9.9	132,584	120,630	96,911	23,719	11,954	4,403	4,006	397
204	34,465	8.1	135,950	120,944	99,761	21,183	15,006	3,945	3,509	435
205	19,790	9.2	93,662	86,017	71,071	14,946	7,645	4,733	4,347	386
206	3,375	5.1	8,272	6,901	5,601	1,300	1,371	2,451	2,045	406
207	35,965	7.3	122,061	107,286	88,234	19,052	14,775	3,394	2,983	411
208	16,510	4.4	33,640	26,666	21,776	4,890	6,974	2,038	1,615	422
209	209,080	12.5	1,835,441	1,729,347	1,501,885	227,462	106,094	8,779	8,271	507
210	95,695	15.2	795,986	745,739	634,675	111,064	50,247	8,318	7,793	525
211	43,615	11.4	258,533	236,880	199,147	37,733	21,653	5,928	5,431	496
212	35	7.9	220	200	174	26	20	6,285	5,709	576
213	5,335	14.2	41,046	37,708	31,043	6,665	3,338	7,694	7,068	626
214	28,550	14.1	243,875	229,453	191,778	37,675	14,422	8,542	8,037	505
215	34,000	8.4	171,361	156,138	130,248	25,890	15,223	5,040	4,592	448
216	4,905	14.4	35,466	32,702	26,304	6,398	2,764	7,231	6,667	564
217	14,495	22.3	187,635	175,024	145,466	29,558	12,611	12,945	12,075	870
218	12,965	10.8	79,672	73,389	61,930	11,459	6,283	6,145	5,660	485
219	17,065	6.4	63,202	54,595	45,808	8,787	8,607	3,704	3,199	504
221	4,075	10.6	24,295	22,014	18,460	3,554	2,281	5,962	5,402	560
222	7,285	5.3	21,897	18,352	15,144	3,208	3,545	3,006	2,519	487
223	16,060	5.8	65,707	57,605	48,766	8,839	8,102	4,091	3,587	504
224	8,735	4.0	20,003	15,669	13,268	2,401	4,334	2,290	1,794	496
225	14,440	4.8	40,467	33,327	27,753	5,574	7,140	2,802	2,308	494
226	4,635	10.0	26,348	24,056	19,991	4,065	2,292	5,685	5,190	494
227	8,010	4.3	20,614	16,631	13,624	3,007	3,983	2,574	2,076	497
228	5,025	4.0	15,521	12,991	10,994	1,997	2,530	3,089	2,585	503
229	4,175	2.6	8,131	6,048	5,087	961	2,083	1,948	1,449	499
230	3,075	7.0	10,462	8,840	7,309	1,531	1,622	3,403	2,875	528
231	7,335	6.9	26,866	23,293	19,044	4,249	3,573	3,663	3,176	487
232	715	7.1	2,608	2,271	1,830	441	337	3,647	3,176	471
233	6,005	12.1	40,619	37,690	31,276	6,414	2,929	6,764	6,277	488
234	5,520	6.2	18,244	15,689	12,943	2,746	2,555	3,305	2,842	463
235	6,955	13.3	36,310	32,633	26,464	6,169	3,677	5,221	4,692	529
236	40,155	10.2	144,001	124,981	99,688	25,293	19,020	3,586	3,112	474
237	1,700	6.0	3,864	3,117	2,460	657	747	2,273	1,834	439
238	5,425	15.2	35,675	32,926	26,600	6,326	2,749	6,576	6,069	507
239	58,540	10.4	231,182	205,803	161,886	43,917	25,379	3,949	3,516	434
240	11,040	10.1	50,989	46,156	36,671	9,485	4,833	4,619	4,181	438

See footnotes at end of table.

Table 72—Continued

Utilization and expenditures for all Medicare short-stay hospital discharges, by diagnosis-related groups (DRGs): Calendar year 1988

DRG number 1/	Utilization		Total expenditures in thousands 2/	Medicare program payments in thousands			Beneficiary cost-sharing in thousands 6/	Average expenditures		
	Number of discharges	Average length of stay		Total 3/	DRG amount			Total	Medicare program payment	Beneficiary cost-sharing
					Direct 4/	Passthrough 5/				
241	5,930	6.7	$16,138	$13,471	$10,610	$2,861	$2,667	$2,722	$2,272	$450
242	2,240	11.4	12,036	11,057	9,019	2,038	979	5,373	4,936	437
243	129,050	7.0	321,428	262,991	203,825	59,166	58,437	2,491	2,038	453
244	11,560	8.2	35,357	30,116	23,601	6,515	5,241	3,059	2,605	453
245	8,055	5.9	16,857	13,390	10,685	2,705	3,467	2,093	1,662	430
246	2,175	6.3	5,136	4,212	3,328	884	924	2,361	1,937	425
247	11,045	6.5	28,041	23,347	19,663	3,684	4,694	2,539	2,114	425
248	6,775	6.1	16,556	13,522	10,626	2,896	3,034	2,443	1,996	448
249	5,855	6.9	17,336	15,611	12,777	2,834	1,725	2,961	2,666	295
250	3,780	7.2	10,102	8,349	6,703	1,646	1,753	2,673	2,209	464
251	4,965	3.5	7,539	5,190	4,111	1,079	2,349	1,518	1,045	473
253	16,420	8.8	52,101	44,130	35,035	9,095	7,971	3,173	2,688	485
254	16,360	5.1	28,954	21,103	15,731	5,372	7,851	1,770	1,290	480
256	9,400	6.7	27,179	22,756	18,986	3,770	4,423	2,891	2,421	470
257	27,610	6.4	105,901	91,911	77,736	14,175	13,990	3,836	3,329	507
258	31,545	4.8	95,466	79,419	67,157	12,262	16,047	3,026	2,518	509
259	3,435	7.2	14,548	12,779	10,719	2,060	1,769	4,235	3,720	515
260	4,265	3.3	10,019	7,902	6,483	1,419	2,117	2,349	1,853	496
261	4,415	3.1	10,049	7,831	6,635	1,196	2,218	2,276	1,774	502
262	3,140	2.5	5,110	3,581	2,986	595	1,529	1,628	1,141	487
263	28,755	22.5	333,076	307,735	255,970	51,765	25,341	11,583	10,702	881
264	6,600	13.9	43,879	40,406	32,574	7,832	3,473	6,648	6,122	526
265	5,155	10.1	30,965	28,224	23,016	5,208	2,741	6,007	5,475	532
266	6,370	4.6	17,319	14,294	11,551	2,743	3,025	2,719	2,244	475
267	530	4.9	1,277	1,018	814	204	259	2,409	1,920	489
268	1,900	4.3	4,617	3,715	2,987	728	902	2,431	1,956	475
269	9,985	12.4	65,943	60,751	50,072	10,679	5,192	6,604	6,084	520
270	6,470	4.9	17,964	14,793	11,972	2,821	3,171	2,776	2,286	490
271	17,915	12.2	87,504	78,048	63,201	14,847	9,456	4,884	4,357	528
272	6,875	9.7	29,327	26,232	20,405	5,827	3,095	4,266	3,816	450
273	3,055	7.3	8,908	7,499	5,499	2,000	1,409	2,916	2,455	461
274	4,225	10.0	18,138	16,475	13,325	3,150	1,663	4,293	3,899	394
275	615	8.5	1,617	1,386	1,169	217	231	2,629	2,253	376
276	1,085	4.3	2,326	1,840	1,359	481	486	2,144	1,696	448
277	56,385	9.0	214,085	188,202	150,956	37,246	25,883	3,797	3,338	459
278	26,745	6.7	71,410	58,735	46,260	12,475	12,675	2,670	2,196	474
279	15	6.3	58	53	34	19	5	3,870	3,510	360
280	12,910	6.9	30,016	24,259	19,058	5,201	5,757	2,325	1,879	446

See footnotes at end of table.

Table 72—Continued

Utilization and expenditures for all Medicare short-stay hospital discharges, by diagnosis-related groups (DRGs): Calendar year 1988

DRG number 1/	Utilization		Total expenditures in thousands 2/	Medicare program payments in thousands			Beneficiary cost-sharing in thousands 6/	Average expenditures		
	Number of discharges	Average length of stay		Total 3/	DRG amount			Total	Medicare program payment	Beneficiary cost-sharing
					Direct 4/	Passthrough 5/				
281	9,915	4.7	$15,425	$10,921	$8,287	$2,634	$4,504	$1,556	$1,101	$454
282	15	2.0	22	17	14	3	5	1,505	1,145	360
283	6,095	7.6	19,106	16,566	12,704	3,862	2,540	3,135	2,718	417
284	3,350	4.9	6,636	5,210	3,798	1,412	1,426	1,981	1,555	426
285	3,795	23.1	49,955	46,813	38,588	8,225	3,142	13,163	12,335	828
286	1,485	13.6	16,892	16,248	13,415	2,833	644	11,375	10,941	434
287	7,560	19.7	74,029	67,966	56,345	11,621	6,063	9,792	8,990	802
288	520	9.8	3,739	3,437	2,850	587	302	7,191	6,611	580
289	3,640	6.4	17,192	15,474	12,725	2,749	1,718	4,723	4,251	472
290	8,905	4.5	28,067	23,596	20,004	3,592	4,471	3,152	2,650	502
291	195	2.6	322	219	182	37	103	1,651	1,124	526
292	5,075	18.9	57,838	54,618	46,175	8,443	3,220	11,397	10,762	634
293	840	8.3	3,985	3,593	3,097	496	392	4,744	4,278	467
294	99,250	7.7	293,705	247,862	194,549	53,313	45,843	2,959	2,497	462
295	3,060	6.6	9,023	7,912	6,259	1,653	1,111	2,949	2,586	363
296	190,695	8.8	711,455	633,815	511,465	122,350	77,640	3,731	3,324	407
297	54,720	5.7	122,289	98,884	78,253	20,631	23,405	2,235	1,807	428
298	125	5.2	381	342	257	85	39	3,052	2,738	313
299	925	8.1	3,030	2,636	2,145	491	394	3,276	2,849	426
300	10,945	9.8	49,112	44,432	35,697	8,735	4,680	4,487	4,060	428
301	2,635	6.1	6,771	5,644	4,446	1,198	1,127	2,570	2,142	428
302	6,105	18.0	171,139	168,122	86,188	81,934	3,017	28,033	27,538	494
303	16,325	14.8	176,046	169,040	145,319	23,721	7,006	10,784	10,355	429
304	14,290	14.4	144,008	137,811	114,961	22,850	6,197	10,078	9,644	434
305	6,155	7.8	31,317	28,957	24,216	4,741	2,360	5,088	4,705	383
306	12,435	10.1	67,986	62,147	52,455	9,692	5,839	5,467	4,998	470
307	6,040	5.3	18,970	16,117	13,628	2,489	2,853	3,141	2,668	472
308	8,270	11.1	51,772	47,644	40,589	7,055	4,128	6,260	5,761	499
309	4,300	4.9	13,139	11,140	9,411	1,729	1,999	3,056	2,591	465
310	34,265	6.2	121,090	104,968	87,702	17,266	16,122	3,534	3,063	471
311	27,445	3.2	56,563	43,526	36,224	7,302	13,037	2,061	1,586	475
312	4,425	6.0	14,320	12,389	10,136	2,253	1,931	3,236	2,800	436
313	3,425	3.1	6,752	5,107	4,068	1,039	1,645	1,971	1,491	480
315	28,180	13.5	295,659	281,091	239,517	41,574	14,568	10,492	9,975	517
316	39,935	9.4	197,007	182,057	151,192	30,865	14,950	4,933	4,559	374
317	1,805	2.9	2,758	2,431	2,014	417	327	1,527	1,346	181
318	7,755	9.2	31,945	29,046	23,608	5,438	2,899	4,119	3,745	374
319	1,620	4.0	3,506	2,919	2,454	465	587	2,164	1,802	363
320	145,195	8.8	573,683	511,374	415,144	96,230	62,309	3,951	3,522	429

See footnotes at end of table.

Table 72—Continued

Utilization and expenditures for all Medicare short-stay hospital discharges, by diagnosis-related groups (DRGs): Calendar year 1988

DRG number 1/	Utilization			Medicare program payments in thousands				Average expenditures		
	Number of discharges	Average length of stay	Total expenditures in thousands 2/	Total 3/	DRG amount		Beneficiary cost-sharing in thousands 6/	Total	Medicare program payment	Beneficiary cost-sharing
					Direct 4/	Passthrough 5/				
321	38,460	6.3	$101,873	85,416	$68,928	$16,488	$16,457	$2,649	$2,221	$428
322	70	5.2	262	224	148	76	38	3,745	3,205	540
323	24,600	4.2	64,931	54,865	46,096	8,769	10,066	2,639	2,230	409
324	16,930	2.8	28,585	21,006	17,635	3,371	7,579	1,688	1,241	448
325	10,945	6.6	29,904	25,742	20,862	4,880	4,162	2,732	2,352	380
326	5,265	3.9	8,847	6,991	5,597	1,394	1,856	1,680	1,328	353
328	1,895	5.0	4,438	3,605	2,915	690	833	2,342	1,902	440
329	620	2.6	947	674	558	116	273	1,527	1,087	440
331	26,440	7.7	98,675	89,090	70,558	18,532	9,585	3,732	3,370	363
332	8,870	4.9	21,098	17,651	13,829	3,822	3,447	2,379	1,990	389
333	385	6.6	1,505	1,381	906	475	124	3,907	3,584	323
334	11,495	11.5	81,608	76,215	64,462	11,753	5,393	7,099	6,630	469
335	8,570	8.7	44,043	40,067	33,801	6,266	3,976	5,139	4,675	464
336	103,020	6.9	400,732	353,463	298,855	54,608	47,269	3,890	3,431	459
337	104,550	4.6	274,954	224,662	188,738	35,924	50,292	2,630	2,149	481
338	10,195	5.5	31,788	27,404	22,384	5,020	4,384	3,118	2,688	430
339	5,340	4.1	12,225	9,737	8,032	1,705	2,488	2,289	1,823	466
340	10	2.5	29	26	24	2	3	2,821	2,551	270
341	16,430	4.8	61,474	53,513	46,273	7,240	7,961	3,742	3,257	485
342	770	3.7	1,602	1,236	1,030	206	366	2,082	1,606	475
344	3,360	7.3	14,049	12,627	10,644	1,983	1,422	4,181	3,758	423
345	2,160	5.6	6,671	5,707	4,758	949	964	3,088	2,642	446
346	9,525	8.3	34,129	30,297	24,797	5,500	3,832	3,583	3,181	402
347	2,255	3.2	4,276	3,298	2,757	541	978	1,896	1,463	434
348	5,085	5.9	13,088	10,980	8,758	2,222	2,108	2,574	2,159	415
349	3,600	3.0	5,386	3,791	3,048	743	1,595	1,496	1,053	443
350	8,465	6.0	20,924	17,286	13,595	3,691	3,638	2,472	2,042	430
352	1,080	4.4	2,283	1,832	1,451	381	451	2,114	1,697	417
353	2,160	14.1	22,521	21,453	16,806	4,647	1,068	10,426	9,932	494
354	7,130	9.8	44,071	40,762	34,007	6,755	3,309	6,181	5,717	464
355	6,820	6.1	24,896	21,752	18,202	3,550	3,144	3,651	3,190	461
356	30,140	5.4	87,044	71,398	58,509	12,889	15,646	2,888	2,369	519
357	6,375	13.7	55,786	52,852	44,563	8,289	2,934	8,751	8,290	460
358	16,280	8.1	77,548	69,347	58,224	11,123	8,201	4,763	4,260	504
359	27,775	5.6	86,979	72,712	60,680	12,032	14,267	3,132	2,618	514
360	4,715	6.4	15,004	12,769	9,878	2,891	2,235	3,182	2,708	474

See footnotes at end of table.

Table 72—Continued

Utilization and expenditures for all Medicare short-stay hospital discharges, by diagnosis-related groups (DRGs): Calendar year 1988

DRG number 1/	Utilization		Total expenditures in thousands 2/	Medicare program payments in thousands			Beneficiary cost-sharing in thousands 6/	Average expenditures		
	Number of discharges	Average length of stay		Total 3/	DRG amount			Total	Medicare program payment	Beneficiary cost-sharing
					Direct 4/	Passthrough 5/				
361	400	5.6	$1,398	$1,236	$966	$270	$162	$3,496	$3,090	$406
362	35	1.9	44	30	25	5	14	1,246	860	386
363	4,465	5.2	12,780	11,044	9,007	2,037	1,736	2,862	2,473	389
364	4,140	3.4	7,076	5,229	4,139	1,090	1,847	1,709	1,263	446
365	3,615	12.2	27,424	25,585	21,616	3,969	1,839	7,586	7,078	509
366	5,595	10.9	25,626	23,459	18,852	4,607	2,167	4,580	4,193	387
367	1,430	4.5	3,265	2,844	2,320	524	421	2,283	1,988	294
368	1,550	8.4	5,386	4,576	3,532	1,044	810	3,475	2,952	523
369	2,740	4.9	5,251	4,112	3,213	899	1,139	1,916	1,501	416
370	365	7.4	1,625	1,469	1,115	354	156	4,451	4,025	426
371	775	4.6	2,096	1,734	1,359	375	362	2,704	2,237	468
372	320	5.1	728	588	416	172	140	2,275	1,836	438
373	1,985	2.5	2,678	1,732	1,269	463	946	1,350	873	477
374	220	2.6	438	333	275	58	105	1,991	1,513	478
375	10	4.5	30	25	18	7	5	3,010	2,470	540
376	115	6.3	232	185	135	50	47	2,019	1,608	410
377	40	2.3	122	108	90	18	14	3,031	2,693	338
378	85	5.3	268	227	170	57	41	3,142	2,666	476
379	225	3.0	332	234	150	84	98	1,474	1,040	434
380	45	2.0	43	24	17	7	19	949	529	420
381	265	2.4	447	325	243	82	122	1,688	1,229	460
382	80	2.0	46	26	16	10	20	565	316	249
383	690	6.2	1,550	1,297	841	456	253	2,247	1,881	366
384	80	3.0	118	89	66	23	29	1,474	1,107	367
385	10	6.5	36	33	26	7	3	3,571	3,301	270
389	25	13.2	211	200	126	74	11	8,428	7,996	432
390	45	8.9	145	126	111	15	19	3,215	2,797	418
392	2,595	18.2	37,360	35,897	31,359	4,538	1,463	14,397	13,833	564
394	2,020	8.3	10,868	9,879	8,188	1,691	989	5,381	4,891	490
395	73,010	6.5	208,563	179,321	144,518	34,803	29,242	2,857	2,456	401
396	130	3.0	260	238	175	63	22	1,990	1,824	166
397	10,445	7.8	42,751	38,882	31,752	7,130	3,869	4,093	3,723	370
398	12,645	9.2	61,037	56,615	46,503	10,112	4,422	4,827	4,477	350
399	2,510	5.5	6,542	5,691	4,516	1,175	851	2,606	2,267	339
400	7,895	15.5	89,418	85,407	73,217	12,190	4,011	11,326	10,818	508

See footnotes at end of table.

Table 72—Continued

Utilization and expenditures for all Medicare short-stay hospital discharges, by diagnosis-related groups (DRGs): Calendar year 1988

DRG number 1/	Utilization		Total expenditures in thousands 2/	Medicare program payments in thousands			Beneficiary cost-sharing in thousands 6/	Average expenditures		
	Number of discharges	Average length of stay		Total 3/	DRG amount			Total	Medicare program payment	Beneficiary cost-sharing
					Direct 4/	Passthrough 5/				
401	6,460	15.8	$59,073	$55,768	$45,849	$9,919	$3,305	$9,145	$8,633	$512
402	3,510	6.0	12,849	11,224	9,270	1,954	1,625	3,661	3,198	463
403	24,455	12.3	157,518	147,403	120,817	26,586	10,115	6,441	6,028	414
404	7,430	6.3	23,908	21,272	17,365	3,907	2,636	3,218	2,863	355
406	4,360	16.4	49,979	47,843	40,645	7,198	2,136	11,463	10,973	490
407	1,745	7.9	9,388	8,623	7,355	1,268	765	5,380	4,942	438
408	10,075	6.9	40,710	36,922	30,278	6,644	3,788	4,041	3,665	376
409	8,530	11.5	39,562	37,200	29,431	7,769	2,362	4,638	4,361	277
410	137,890	3.5	266,942	249,130	206,377	42,753	17,812	1,936	1,807	129
411	490	3.9	955	790	600	190	165	1,951	1,613	337
412	365	3.1	536	387	302	85	149	1,468	1,062	407
413	10,055	11.2	51,585	47,576	38,884	8,692	4,009	5,130	4,732	399
414	3,475	6.8	10,903	9,681	7,988	1,693	1,222	3,138	2,786	352
415	24,010	21.9	369,034	349,896	299,375	50,521	19,138	15,370	14,573	797
416	109,140	10.7	659,563	610,470	520,399	90,071	49,093	6,043	5,593	450
417	95	7.5	455	434	290	144	21	4,797	4,576	220
418	11,735	8.4	44,945	41,954	33,465	8,489	2,991	3,830	3,575	255
419	16,040	7.5	58,404	52,855	43,244	9,611	5,549	3,641	3,295	346
420	4,285	5.7	10,733	9,091	7,272	1,819	1,642	2,505	2,122	383
421	14,950	5.9	35,961	29,229	23,058	6,171	6,732	2,405	1,955	450
422	100	5.8	301	279	204	75	22	3,008	2,792	216
423	6,770	11.3	41,703	38,553	31,863	6,690	3,150	6,160	5,695	465
424	5,255	25.5	49,755	45,188	38,782	6,406	4,567	9,468	8,599	869
425	19,040	7.6	48,981	41,538	33,923	7,615	7,443	2,573	2,182	391
426	17,700	10.6	53,537	46,133	41,462	4,671	7,404	3,025	2,606	418
427	4,830	10.7	15,205	13,112	11,906	1,206	2,093	3,148	2,715	433
428	2,990	12.9	11,169	9,647	8,642	1,005	1,522	3,736	3,227	509
429	45,515	14.2	188,795	165,651	142,216	23,435	23,144	4,148	3,639	508
430	173,770	16.8	835,631	744,593	693,562	51,031	91,038	4,809	4,285	524
431	630	9.7	1,859	1,617	1,461	156	242	2,949	2,565	383
432	830	10.3	3,075	2,728	2,245	483	347	3,704	3,286	418
433	5,250	4.9	8,693	6,922	5,528	1,394	1,771	1,656	1,318	337
434	18,510	8.9	60,546	52,762	43,295	9,467	7,784	3,271	2,850	421
435	15,695	8.1	38,675	32,336	27,350	4,986	6,339	2,464	2,060	404
436	4,520	16.2	17,756	16,108	12,985	3,123	1,648	3,929	3,564	365
437	10,090	17.4	51,607	47,257	38,654	8,603	4,350	5,115	4,684	431
439	1,260	13.8	9,679	8,976	7,368	1,608	703	7,682	7,124	558
440	7,410	17.1	77,508	72,834	60,359	12,475	4,674	10,460	9,829	631

See footnotes at end of table.

Table 72—Continued

Utilization and expenditures for all Medicare short-stay hospital discharges, by diagnosis-related groups (DRGs): Calendar year 1988

DRG number 1/	Utilization			Medicare program payments in thousands				Average expenditures		
	Number of discharges	Average length of stay	Total expenditures in thousands 2/	Total 3/	DRG amount		Beneficiary cost-sharing in thousands 6/	Total	Medicare program payment	Beneficiary cost-sharing
					Direct 4/	Passthrough 5/				
441	1,185	4.4	$3,388	$2,838	$2,402	$436	$550	$2,859	$2,394	$464
442	43,770	10.3	368,984	349,717	300,038	49,679	19,267	8,430	7,990	440
443	14,125	6.5	67,026	61,227	51,751	9,476	5,799	4,745	4,335	411
444	3,935	6.8	11,735	9,951	8,070	1,881	1,784	2,982	2,529	453
445	2,850	5.3	5,689	4,263	3,348	915	1,426	1,997	1,496	500
447	2,695	3.9	5,076	3,860	3,076	784	1,216	1,883	1,432	451
449	32,635	6.8	102,403	90,072	74,130	15,942	12,331	3,138	2,760	378
450	10,965	4.1	20,578	16,267	13,229	3,038	4,311	1,877	1,484	393
451	30	3.7	68	63	48	15	5	2,271	2,091	180
452	24,310	7.1	91,176	82,923	67,592	15,331	8,253	3,751	3,411	339
453	10,035	4.3	20,490	17,774	14,106	3,668	2,716	2,042	1,771	271
454	5,280	7.3	18,807	16,429	13,422	3,007	2,378	3,562	3,111	450
455	1,880	4.6	3,118	2,235	1,723	512	883	1,659	1,189	470
456	340	16.9	4,964	4,726	3,898	828	238	14,599	13,900	699
457	170	7.7	2,538	2,445	2,182	263	93	14,927	14,379	548
458	1,945	25.5	37,042	35,608	30,007	5,601	1,434	19,045	18,308	737
459	985	17.3	8,621	8,064	6,447	1,617	557	8,751	8,186	565
460	2,430	9.7	10,545	9,251	7,309	1,942	1,294	4,339	3,807	532
461	9,900	10.3	50,810	44,179	40,511	3,668	6,631	5,132	4,462	670
462	74,450	22.6	636,381	596,801	586,853	9,948	39,580	8,548	8,016	532
463	10,395	7.2	30,827	26,943	21,575	5,368	3,884	2,966	2,592	374
464	3,485	4.5	6,018	4,616	3,704	912	1,402	1,727	1,324	402
465	805	3.1	1,170	834	695	139	336	1,455	1,037	418
466	5,385	5.3	9,742	8,183	6,889	1,294	1,559	1,809	1,519	289
467	5,365	4.4	9,973	7,846	6,285	1,561	2,127	1,859	1,462	396
468	114,965	17.5	1,258,949	1,185,962	1,013,151	172,811	72,987	10,951	10,316	635
470	155	4.8	192	163	163	0	29	1,238	1,051	186
471	5,430	17.8	83,006	79,846	69,110	10,736	3,160	15,287	14,705	582
472	305	37.3	19,260	18,851	16,795	2,056	409	63,146	61,805	1,341
473	8,390	16.9	107,167	102,783	87,859	14,924	4,384	12,773	12,251	523
474	12,990	50.3	645,013	616,314	550,418	65,896	28,699	49,655	47,445	2,209
475	46,180	14.5	588,369	565,946	500,584	65,362	22,423	12,741	12,255	486

See footnotes at end of table.

Table 72—Continued

Utilization and expenditures for all Medicare short-stay hospital discharges, by diagnosis-related groups (DRGs): Calendar year 1988

DRG number 1/	Utilization		Total expenditures in thousands 2/	Medicare program payments in thousands			Beneficiary cost-sharing in thousands 6/	Average expenditures		
	Number of discharges	Average length of stay		Total 3/	DRG amount			Total	Medicare program payment	Beneficiary cost-sharing
					Direct 4/	Passthrough 5/				
476	2,830	17.9	25,431	24,056	20,887	3,169	1,375	8,986	8,501	486
477	8,490	11.5	51,824	47,082	41,251	5,831	4,742	6,104	5,546	559

1/ DRG numbers are derived from the *Diagnosis Related Groups, Fourth Revision, Definitions Manual*, effective October 1, 1987.
2/ Total Medicare expenditures are equal to the sum of the Medicare prospective payment system (PPS) program payments plus Medicare beneficiary cost-sharing liability for Part A deductibles and coinsurance amounts.
3/ Total Medicare PPS program payments represent the amount reimbursed by the Medicare program plus passthrough amounts.
4/ The direct DRG amount is based on the DRG payment amount (derived from the Health Care Financing Administration DRGPRICE program) plus outlier payments for cases with exceptionally long stays or exceptionally high costs relative to other cases in the same DRG.
5/ DRG passthrough payments represent Medicare payments for capital, direct medical education, and kidney acquisition expenditures for which the hospitals are reimbursed on a reasonable-cost basis; that is, passthrough amounts are not reimbursed through the Medicare PPS.
6/ Beneficiary cost-sharing includes the Part A inpatient hospital deductible plus any inpatient hospital coinsurance amounts.

NOTE: DRGs with less than 6 discharges were excluded from the table.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System, data development by the Office of Research and Demonstrations.

Appendix D
Leading 200 HCFA Common Procedure Coding System (HCPCS) codes: Calendar year 1988

Table 73

Persons using Part B physician and supplier services under Medicare, services in descending order, and charges, by the 200 most frequently reported Health Care Financing Administration Common Procedures Coding System (HCPCS) codes: Calendar year 1988

Leading HCPCS codes	Number of persons	Services			Submitted charges			Allowed charges		
		Number	Average per person	Percent assigned	Amount	Average per person	Percent assigned	Amount	Average per person	Percent assigned
Total	26,258,940	728,462,780	27.7	76.4	$44,190,035,377	$1,681	78.2	$31,133,366,483	$1,186	76.9
Leading	—	552,885,000	—	—	21,627,255,995	—	—	15,715,722,998	—	—
90050	12,251,640	43,983,200	3.6	50.6	1,205,007,851	98	54.8	917,554,240	75	53.5
90060	12,144,240	43,769,380	3.6	58.8	1,436,701,510	118	63.1	1,140,791,142	94	61.5
90260	3,173,700	30,608,500	9.6	81.9	1,255,127,077	395	84.3	922,890,814	291	83.0
36415	10,202,120	27,027,780	2.6	95.4	143,309,136	14	95.3	80,620,557	8	95.4
90250	2,516,420	23,203,900	9.2	73.6	827,365,368	329	77.3	589,450,216	234	75.7
93010	6,150,860	16,793,720	2.7	87.5	301,542,642	49	87.9	215,252,947	35	87.2
81000	7,856,980	15,517,720	2.0	93.4	139,901,815	18	93.6	74,991,432	10	93.4
71020	8,503,760	15,280,660	1.8	69.3	450,109,633	53	67.7	334,338,338	39	66.0
71010	4,312,480	12,473,400	2.9	78.9	250,934,984	58	79.8	171,024,086	40	78.4
90040	4,819,800	12,268,180	2.5	49.3	282,395,118	59	52.6	213,108,758	44	51.9
80019	6,163,160	12,104,980	2.0	97.5	226,158,659	37	97.3	145,810,204	24	97.4
93000	6,502,880	9,618,240	1.5	60.4	408,003,054	63	63.8	336,411,856	52	62.2
90070	4,287,140	9,329,740	2.2	61.7	403,267,915	94	65.7	317,342,841	74	64.6
A2000	931,160	8,326,880	8.9	45.0	176,174,254	189	48.5	138,768,801	149	46.9
82947	2,664,020	8,088,840	3.0	93.2	84,042,650	32	93.4	47,355,894	18	93.0
90240	964,380	7,426,160	7.7	73.6	227,485,142	236	76.8	149,701,595	155	76.0
90270	1,373,180	7,204,380	5.2	83.2	384,174,383	280	85.4	283,553,788	206	84.7
90220	3,889,160	5,707,100	1.5	75.2	607,205,512	156	77.8	448,047,319	115	76.3
90620	3,267,800	5,184,060	1.6	79.5	629,649,326	193	81.5	479,027,762	147	80.4
85025	3,116,640	4,864,640	1.6	97.3	74,797,760	24	97.2	55,842,482	18	97.5
82270	2,799,120	4,672,420	1.7	92.3	31,261,652	11	93.2	16,696,357	6	92.8
92014	3,833,580	4,621,320	1.2	57.4	218,532,133	57	60.7	184,960,088	48	60.1
85022	2,773,500	4,594,180	1.7	95.3	66,752,817	24	94.9	38,593,131	14	95.1
92012	2,560,060	4,450,540	1.7	64.2	168,503,859	66	67.4	137,819,907	54	67.0
90080	3,607,940	4,248,860	1.2	50.3	279,370,656	77	51.5	210,938,240	58	50.2
85610	850,920	4,138,820	4.9	95.8	47,339,860	56	95.8	25,078,408	29	95.8
83718	2,521,420	3,382,900	1.3	97.4	53,286,751	21	97.2	37,956,590	15	97.4
84436	2,709,660	3,362,100	1.2	97.6	47,481,855	18	97.4	32,120,530	12	97.5
A0010	1,604,500	3,338,560	2.1	81.1	387,482,562	241	81.7	272,058,403	170	82.6
A0020	1,511,920	3,214,020	2.1	85.3	122,268,731	81	84.3	87,120,787	58	84.7
90020	2,762,160	3,180,060	1.2	61.5	248,576,634	90	64.6	184,806,528	67	63.0
90292	2,157,460	3,071,460	1.4	76.4	163,366,031	76	79.9	109,658,983	51	78.6
88304	2,178,080	3,004,040	1.4	75.3	149,992,965	69	76.1	106,559,851	49	75.7
84132	1,512,840	2,716,120	1.8	93.1	31,963,119	21	93.1	18,116,821	12	93.0
85031	1,446,560	2,610,660	1.8	93.1	39,104,823	27	92.9	22,914,740	16	92.9
P9604	563,880	2,605,820	4.6	96.9	17,795,938	32	97.4	7,316,711	13	96.9
90280	494,140	2,590,720	5.2	83.8	146,649,894	297	86.1	109,216,317	221	85.3
90015	2,273,420	2,561,760	1.1	54.1	115,837,948	51	57.1	90,264,304	40	55.5
85021	1,494,240	2,559,100	1.7	95.6	31,880,891	21	95.2	20,958,436	14	95.5
99173	499,200	2,534,340	5.1	82.9	163,370,140	327	84.9	124,636,718	250	83.7

See footnotes at end of table.

Table 73—Continued

Persons using Part B physician and supplier services under Medicare, services in descending order, and charges, by the 200 most frequently reported Health Care Financing Administration Common Procedures Coding System (HCPCS) codes: Calendar year 1988

Leading HCPCS codes	Number of persons	Services			Submitted charges			Allowed charges		
		Number	Average per person	Percent assigned	Amount	Average per person	Percent assigned	Amount	Average per person	Percent assigned
90515	1,854,760	2,369,300	1.3	87.7	$144,868,100	$78	88.4	$88,510,858	$48	87.7
83720	1,708,900	2,307,860	1.4	98.1	47,840,111	28	98.1	38,772,521	23	98.2
76091	2,083,940	2,194,760	1.1	62.0	146,456,941	70	62.6	116,404,019	56	60.4
90030	1,047,020	2,135,300	2.0	56.2	34,780,091	33	61.7	25,064,231	24	60.8
87086	1,218,980	2,090,240	1.7	96.2	41,191,433	34	96.4	24,097,450	20	96.4
E0410	86,780	2,086,580	24.0	91.3	187,769,075	2,164	92.0	150,717,853	1,737	91.6
90360	411,820	2,058,380	5.0	79.8	75,671,668	184	82.2	56,045,121	136	81.5
85023	1,166,580	2,025,960	1.7	95.7	37,263,114	32	95.3	24,385,975	21	95.5
82465	1,293,280	1,983,420	1.5	93.6	22,286,090	17	93.6	12,308,385	10	93.3
90350	387,180	1,927,840	5.0	75.1	63,982,554	165	78.4	45,544,910	118	77.7
85651	1,219,300	1,853,840	1.5	95.1	19,468,171	16	95.3	10,122,422	8	95.2
88305	1,420,840	1,798,300	1.3	79.3	153,240,334	108	80.2	104,233,093	73	80.2
90215	1,294,460	1,795,720	1.4	70.5	157,559,804	122	73.4	110,196,645	85	71.4
90844	246,140	1,772,300	7.2	82.8	151,556,085	616	83.8	100,658,984	409	85.1
90843	292,440	1,756,140	6.0	76.5	87,574,011	299	78.0	54,824,027	187	79.9
82643	945,440	1,751,160	1.9	97.1	61,149,439	65	97.0	35,368,107	37	97.1
92004	1,655,980	1,749,740	1.1	56.4	88,298,393	53	59.5	73,177,872	44	58.4
85580	805,480	1,739,760	2.2	95.1	16,221,314	20	94.4	9,852,276	12	94.6
74000	1,078,920	1,733,300	1.6	78.9	38,116,087	35	79.3	25,154,235	23	77.8
85650	1,191,940	1,707,580	1.4	94.7	16,564,768	14	94.7	9,034,582	8	94.5
84443	1,302,440	1,680,320	1.3	97.1	65,998,279	51	97.0	41,811,323	32	97.1
90517	1,331,460	1,652,060	1.2	89.0	148,822,641	112	89.5	88,469,416	66	89.1
66984	889,080	1,639,280	1.8	81.4	2,356,056,920	2,650	85.1	1,712,577,402	1,926	84.2
90510	1,320,920	1,637,980	1.2	85.1	70,458,441	53	85.7	41,847,748	32	85.4
90010	1,459,860	1,614,500	1.1	47.1	60,772,839	42	49.6	47,955,271	33	48.3
87184	724,520	1,545,700	2.1	96.8	21,006,753	29	96.1	13,206,571	18	96.3
73510	915,960	1,525,920	1.7	71.7	55,741,601	61	71.8	41,860,044	46	70.2
85018	864,000	1,508,780	1.7	89.1	10,487,982	12	89.2	5,269,371	6	89.3
81002	873,120	1,476,600	1.7	93.4	10,023,569	11	94.1	5,214,238	6	93.3
17000	945,260	1,461,860	1.5	58.6	61,361,678	65	63.7	48,658,454	51	62.4
84479	1,206,560	1,457,720	1.2	97.4	19,244,598	16	97.1	13,201,345	11	97.3
77410	81,040	1,441,500	17.8	83.5	121,453,914	1,499	85.4	89,271,657	1,102	84.5
90450	354,240	1,419,680	4.0	66.0	42,290,109	119	68.9	29,757,506	84	68.8
17002	268,220	1,404,720	5.2	74.7	16,114,467	60	82.0	11,322,994	42	80.9
80002	672,960	1,385,640	2.1	96.7	18,672,482	28	95.9	9,273,063	14	96.2
90630	1,021,860	1,357,820	1.3	80.2	210,930,431	206	82.7	165,394,276	162	81.8
20610	727,420	1,347,600	1.9	63.1	58,296,803	80	69.6	40,820,497	56	67.5
77405	87,220	1,330,720	15.3	81.3	87,901,570	1,008	82.8	64,542,136	740	82.2
P9605	373,540	1,323,580	3.5	98.6	9,783,641	26	98.6	4,017,371	11	98.3
99174	278,460	1,295,840	4.7	86.1	103,882,135	373	88.3	77,156,154	277	87.4
17001	561,220	1,280,180	2.3	66.6	27,376,416	49	73.5	20,215,066	36	71.8
80016	955,440	1,258,540	1.3	95.1	39,568,360	41	95.1	18,931,912	20	94.9

See footnotes at end of table.

Table 73—Continued

Persons using Part B physician and supplier services under Medicare, services in descending order, and charges, by the 200 most frequently reported Health Care Financing Administration Common Procedures Coding System (HCPCS) codes: Calendar year 1988

Leading HCPCS codes	Number of persons	Services			Submitted charges			Allowed charges		
		Number	Average per person	Percent assigned	Amount	Average per person	Percent assigned	Amount	Average per person	Percent assigned
85027	697,000	1,253,020	1.8	95.9	$19,101,431	$27	95.6	$11,724,860	$17	95.7
A4348	124,140	1,224,200	9.9	90.8	16,210,121	131	91.2	11,726,417	94	91.0
85014	677,020	1,197,200	1.8	89.6	8,343,929	12	90.1	4,245,497	6	89.3
P9603	121,360	1,193,620	9.8	98.7	2,746,416	23	98.7	1,772,355	15	98.8
A4366	83,820	1,190,940	14.2	62.7	16,047,628	191	72.6	13,857,181	165	72.1
90642	323,240	1,175,040	3.6	87.5	62,576,374	194	89.4	45,594,667	141	89.2
99172	267,220	1,172,560	4.4	75.7	66,598,429	249	78.0	50,302,251	188	76.7
82948	408,840	1,165,900	2.9	91.8	9,731,257	24	92.1	5,420,792	13	91.6
84478	831,680	1,165,220	1.4	95.0	15,223,653	18	94.9	9,764,109	12	94.8
90610	995,500	1,161,800	1.2	70.1	108,262,716	109	72.4	80,546,042	81	71.0
A0070	841,780	1,161,500	1.4	79.9	24,270,606	29	80.4	16,664,378	20	80.8
95125	60,600	1,146,000	18.9	63.4	9,623,480	159	62.1	7,679,212	127	61.4
11701	351,000	1,132,160	3.2	78.1	15,480,672	44	77.3	12,253,491	35	76.3
E1396	141,160	1,125,100	8.0	92.5	294,215,247	2,084	90.2	249,060,405	1,764	90.6
A4362	70,260	1,124,720	16.0	54.3	9,366,957	133	63.7	8,021,788	114	63.2
80018	799,580	1,104,960	1.4	96.1	35,212,591	44	96.1	16,685,345	21	95.8
85007	616,660	1,084,260	1.8	95.2	8,936,556	14	94.9	5,231,145	8	95.0
99070	522,860	1,050,980	2.0	63.4	17,660,187	34	64.1	13,295,405	25	65.7
80004	646,440	1,034,540	1.6	96.0	26,102,917	40	95.8	9,472,267	15	95.5
70450	821,060	1,032,740	1.3	80.8	132,468,276	161	82.5	104,039,171	127	81.8
11700	463,560	1,029,360	2.2	80.0	25,737,039	56	82.0	20,442,931	44	81.3
99160	621,200	1,009,560	1.6	82.0	129,269,435	208	84.1	91,228,531	147	83.1
85024	596,520	1,005,500	1.7	95.7	17,179,764	29	95.7	11,949,477	20	95.6
90460	286,400	999,160	3.5	73.2	35,569,316	124	75.7	25,533,026	89	75.2
73560	634,300	990,120	1.6	64.5	33,261,394	52	65.9	24,006,091	38	63.9
97128	209,440	974,080	4.7	74.1	17,627,381	84	79.1	12,649,018	60	77.8
82756	810,440	969,500	1.2	97.6	20,512,722	25	97.4	14,430,279	18	97.6
90605	795,200	959,800	1.2	70.1	71,343,519	90	72.1	52,143,170	66	70.5
74020	670,080	958,020	1.4	78.6	27,749,138	41	79.6	19,581,327	29	78.7
85595	353,960	953,800	2.7	95.8	10,248,795	29	95.5	6,143,212	17	95.8
76700	836,740	936,860	1.1	77.3	100,646,242	120	80.3	72,163,066	86	78.9
97010	148,160	926,600	6.3	74.7	16,035,666	108	79.5	11,715,777	79	78.2
72110	833,240	920,260	1.1	71.0	51,547,865	62	69.6	39,454,187	47	68.4
90017	863,860	919,220	1.1	57.5	48,799,508	56	60.6	37,132,876	43	58.6
87088	544,880	917,160	1.7	95.9	16,087,147	30	95.6	10,136,220	19	96.0
99171	197,160	914,020	4.6	76.2	48,128,479	244	78.2	34,370,692	174	77.1
W9045	146,240	902,340	6.2	77.0	37,991,960	260	78.2	23,885,514	163	78.1
A4354	138,280	879,720	6.4	90.2	9,451,363	68	90.9	7,158,822	52	91.2
90340	179,060	877,320	4.9	70.4	23,982,674	134	73.1	17,276,007	96	72.5
74270	831,800	876,900	1.1	70.0	55,755,190	67	69.4	37,632,088	45	67.8
11710	398,040	876,620	2.2	79.0	22,651,341	57	81.3	18,941,280	48	80.9
97110	144,220	870,960	6.0	70.4	21,744,537	151	75.5	14,987,568	104	73.4

See footnotes at end of table.

Table 73—Continued

Persons using Part B physician and supplier services under Medicare, services in descending order, and charges, by the 200 most frequently reported Health Care Financing Administration Common Procedures Coding System (HCPCS) codes: Calendar year 1988

Leading HCPCS codes	Number of persons	Services			Submitted charges			Allowed charges		
		Number	Average per person	Percent assigned	Amount	Average per person	Percent assigned	Amount	Average per person	Percent assigned
83036	472,760	864,380	1.8	96.3	$21,042,657	$45	96.3	$11,609,160	$25	96.3
80061	594,080	856,140	1.4	94.6	30,131,358	51	94.7	22,289,618	38	94.7
11711	333,900	845,940	2.5	75.7	12,751,167	38	75.4	10,249,737	31	75.0
73030	619,040	845,440	1.4	69.3	29,384,650	47	69.9	21,724,495	35	68.0
80003	589,140	844,000	1.4	95.7	23,641,601	40	95.7	8,110,887	14	95.2
90841	137,500	837,860	6.1	79.9	47,698,436	347	83.6	29,855,560	217	85.2
73630	580,860	836,800	1.4	72.7	31,419,384	54	73.4	22,648,227	39	72.3
77400	71,520	826,720	11.6	80.8	43,719,920	611	82.2	29,953,848	419	81.4
80500	340,420	821,840	2.4	81.3	26,938,365	79	84.8	18,795,968	55	83.7
93309	699,220	803,200	1.1	81.2	162,294,662	232	82.7	123,707,944	177	82.0
45330	758,780	797,280	1.1	61.3	121,228,440	160	68.6	77,772,970	102	63.6
72170	636,220	792,640	1.2	69.9	22,758,660	36	70.4	16,288,574	26	68.2
90600	673,060	789,820	1.2	64.7	49,538,419	74	67.1	34,942,470	52	65.7
93870	659,780	787,880	1.2	81.0	126,282,430	191	83.7	92,533,851	140	82.7
81005	484,280	785,580	1.6	95.8	4,652,298	10	95.8	2,520,812	5	95.8
E0430	120,120	779,580	6.5	92.7	42,393,158	353	92.6	29,341,558	244	91.9
95900	239,120	778,700	3.3	83.0	33,956,725	142	85.1	24,463,814	102	84.3
80070	660,940	778,580	1.2	96.3	22,060,741	33	96.1	16,967,693	26	96.5
V2203	487,160	774,080	1.6	63.5	32,163,582	66	62.8	27,391,656	56	63.6
84520	486,960	772,360	1.6	93.3	8,737,582	18	93.4	4,509,602	9	92.9
87070	523,980	767,900	1.5	97.6	17,264,354	33	97.7	9,784,588	19	97.7
A4357	85,700	760,940	8.9	87.3	9,040,393	105	88.7	7,348,261	86	88.0
78306	662,720	753,020	1.1	76.5	84,032,821	127	77.6	63,984,568	97	76.1
A4550	518,540	752,940	1.5	63.7	20,800,402	40	67.8	12,556,174	24	66.3
72100	642,400	744,360	1.2	65.5	31,701,138	49	66.3	24,256,618	38	64.8
70470	658,700	733,600	1.1	75.6	126,552,868	192	77.1	101,089,590	153	76.2
85029	422,860	732,320	1.7	97.9	4,658,525	11	97.6	3,550,022	8	97.7
80012	552,600	722,860	1.3	94.2	19,067,360	35	93.7	8,900,387	16	93.7
93042	366,060	717,780	2.0	92.1	11,818,897	32	93.0	7,177,912	20	92.7
J9190	47,800	712,080	14.9	62.9	8,872,502	186	80.8	2,996,001	63	76.9
E1130	167,980	706,520	4.2	86.7	47,495,017	283	78.4	32,209,308	192	80.8
88150	651,360	703,920	1.1	91.3	9,124,643	14	91.9	5,192,341	8	90.4
52000	545,720	703,400	1.3	63.4	119,121,556	218	69.5	78,935,460	145	66.2
V2755	383,720	703,160	1.8	73.9	11,903,429	31	76.9	10,048,341	26	77.0
J3420	194,180	698,400	3.6	48.9	5,660,146	29	50.9	2,079,258	11	48.0
A4421	102,860	697,780	6.8	61.1	15,133,803	147	64.9	14,369,775	140	64.7
80006	421,360	697,060	1.7	97.0	19,056,921	45	96.9	6,755,091	16	96.6
V2020	638,540	693,680	1.1	64.5	41,856,617	66	60.7	31,866,886	50	64.3
17100	482,260	692,260	1.4	58.4	26,026,768	54	65.1	18,605,963	39	62.3
W0703	220,160	683,500	3.1	99.8	5,677,906	26	99.8	2,914,907	13	99.8
94010	546,380	682,540	1.2	71.1	31,000,975	57	76.2	21,631,601	40	74.2
E0570	118,100	680,500	5.8	92.6	41,597,191	352	91.7	29,923,541	253	91.5

See footnotes at end of table.

Table 73—Continued

Persons using Part B physician and supplier services under Medicare, services in descending order, and charges, by the 200 most frequently reported Health Care Financing Administration Common Procedures Coding System (HCPCS) codes: Calendar year 1988

Leading HCPCS codes	Number of persons	Services			Submitted charges			Allowed charges		
		Number	Average per person	Percent assigned	Amount	Average per person	Percent assigned	Amount	Average per person	Percent assigned
17102	148,080	674,300	4.6	67.4	$8,029,580	$54	78.0	$4,587,821	$31	74.5
P9600	263,120	672,900	2.6	98.9	4,821,059	18	99.1	2,033,646	8	99.0
95155	52,260	671,700	12.9	53.9	6,344,625	121	50.9	4,910,649	94	51.8
90520	538,440	670,300	1.2	90.3	76,664,750	142	90.9	49,779,913	92	90.3
82565	410,560	660,980	1.6	94.3	8,002,848	19	94.1	4,482,945	11	93.7
11100	539,120	658,240	1.2	61.5	38,131,268	71	66.3	28,238,268	52	64.8
73620	429,940	656,680	1.5	69.5	24,803,957	58	72.4	17,965,096	42	71.0
99000	308,340	649,660	2.1	49.5	3,267,934	11	51.6	1,961,832	6	49.8
74240	584,380	643,840	1.1	69.7	38,685,562	66	68.9	27,618,419	47	67.6
77415	155,840	641,300	4.1	79.7	20,362,132	131	82.5	12,343,239	79	80.4
92225	484,720	639,120	1.3	74.0	29,095,556	60	78.0	21,247,596	44	76.8
90505	508,120	631,220	1.2	84.4	21,044,973	41	85.4	12,130,683	24	84.6
84420	324,720	630,140	1.9	96.4	22,282,469	69	96.5	12,924,454	40	96.3
92250	389,060	629,720	1.6	65.7	21,880,161	56	78.5	14,857,005	38	77.0
85048	342,080	618,420	1.8	88.0	4,393,126	13	87.7	2,325,329	7	87.6
90641	191,820	612,800	3.2	79.3	25,126,050	131	81.6	17,284,499	90	80.9
90560	430,100	611,100	1.4	77.0	27,936,168	65	78.8	15,091,400	35	77.9
M0021	91,540	601,960	6.6	63.5	26,181,943	286	64.5	17,372,451	190	64.4
90000	537,360	601,820	1.1	49.5	19,227,282	36	51.9	14,563,435	27	50.5
92083	475,420	595,740	1.3	71.5	46,113,020	97	75.3	35,371,312	74	74.9
90991	12,340	594,440	48.2	93.4	20,879,623	1,692	84.1	14,175,333	1,149	84.4
M0945	61,960	582,220	9.4	96.8	143,319,500	2,313	97.3	79,473,650	1,283	96.9
W9062	183,840	582,060	3.2	84.0	18,655,336	101	85.1	12,940,565	70	84.6
74160	497,860	580,620	1.2	78.4	101,775,863	204	79.1	79,615,982	160	78.9
90160	200,920	579,940	2.9	67.8	27,942,097	139	72.7	21,268,086	106	71.8
93015	517,060	579,540	1.1	65.0	105,697,882	204	68.6	81,111,414	157	67.2
95120	28,220	578,960	20.5	69.5	2,769,672	98	57.7	2,168,736	77	57.7
86592	501,340	572,660	1.1	97.6	4,992,214	10	97.5	3,245,999	6	97.6
A4345	90,040	570,140	6.3	91.4	7,602,918	84	91.9	5,741,721	64	92.1
20550	298,480	566,860	1.9	63.8	20,819,835	70	68.8	14,240,575	48	66.9
92100	305,020	564,360	1.9	61.7	13,375,008	44	66.1	10,170,711	33	64.4
88302	463,720	560,540	1.2	75.1	21,937,865	47	75.3	15,704,300	34	74.3
93910	388,520	554,760	1.4	86.9	73,059,074	188	90.2	51,678,657	133	89.5
88307	462,840	551,560	1.2	80.2	65,165,092	141	79.5	44,675,516	97	79.4
All other	—	175,026,220	—	—	22,497,614,290	—	—	15,372,967,969	—	—

NOTE: For explanation of codes, refer to Health Care Financing Administration: 1988 HCFA Common Procedure Coding System, Bureau of Policy Development, Baltimore, Maryland. December 1990.

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Table 74

Persons using Part B physician and supplier services under Medicare, services, and charges in descending order, by the 200 most frequently reported Health Care Financing Administration Common Procedures Coding System (HCPCS) codes: Calendar year 1988

Leading HCPCS code	Number of persons	Services			Submitted charges			Allowed charges		
		Number	Mean	Percent assigned	Amount	Mean	Percent assigned	Amount	Mean	Percent assigned
Total	26,250,020	728,462,780	27.8	76.4	$44,153,047,202	$1,682	78.2	$31,133,366,483	$1,186	76.9
66984	889,080	1,639,280	1.8	81.4	2,356,056,920	2,650	85.1	1,712,577,402	1,926	84.2
90060	12,144,240	43,769,380	3.6	58.8	1,436,701,510	118	63.1	1,140,791,142	94	61.5
90260	3,173,700	30,608,500	9.6	81.9	1,255,127,077	395	84.3	922,890,814	291	83.0
90050	12,251,640	43,983,200	3.6	50.6	1,205,007,851	98	54.8	917,554,240	75	53.5
90250	2,516,420	23,203,900	9.2	73.6	827,365,368	329	77.3	589,450,216	234	75.7
90620	3,267,800	5,184,060	1.6	79.5	629,649,326	193	81.5	479,027,762	147	80.4
90220	3,889,160	5,707,100	1.5	75.2	607,205,512	156	77.8	448,047,319	115	76.3
93000	6,502,880	9,618,240	1.5	60.4	408,003,054	63	63.8	336,411,856	52	62.2
71020	8,503,760	15,280,660	1.8	69.3	450,109,633	53	67.7	334,338,338	39	66.0
90070	4,287,140	9,329,740	2.2	61.7	403,267,915	94	65.7	317,342,841	74	64.6
52601	246,120	418,940	1.7	62.1	420,108,757	1,707	68.2	301,968,845	1,227	66.5
90270	1,373,180	7,204,380	5.2	83.2	384,174,383	280	85.4	283,553,788	206	84.7
A0010	1,604,500	3,338,560	2.1	81.1	387,482,562	241	81.7	272,058,403	170	82.6
E1396	141,160	1,125,100	8.0	92.5	294,215,247	2,084	90.2	249,060,405	1,764	90.6
93010	6,150,860	16,793,720	2.7	87.5	301,542,642	49	87.9	215,252,947	35	87.2
90040	4,819,800	12,268,180	2.5	49.3	282,395,118	59	52.6	213,108,758	44	51.9
90080	3,607,940	4,248,860	1.2	50.3	279,370,656	77	51.5	210,938,240	58	50.2
66821	343,760	408,420	1.2	82.4	312,849,503	910	84.3	204,004,815	593	82.6
33512	47,200	100,860	2.1	71.7	278,910,738	5,909	78.9	203,842,089	4,319	78.7
27447	68,460	162,720	2.4	61.3	277,645,611	4,056	67.5	191,291,613	2,794	65.5
92014	3,833,580	4,621,320	1.2	57.4	218,532,133	57	60.7	184,960,088	48	60.1
90020	2,762,160	3,180,060	1.2	61.5	248,576,634	90	64.6	184,806,528	67	63.0
27130	72,260	148,760	2.1	61.8	257,884,489	3,569	68.5	180,508,881	2,498	66.8
45378	402,300	426,480	1.1	78.7	221,400,341	550	81.3	174,998,447	435	80.2
71010	4,312,480	12,473,400	2.9	78.9	250,934,984	58	79.8	171,024,086	40	78.4
33513	35,140	77,420	2.2	73.1	228,514,437	6,503	78.4	168,847,281	4,805	78.2
93547	226,220	238,260	1.1	75.7	214,529,906	948	78.2	167,122,161	739	76.9
90630	1,021,860	1,357,820	1.3	80.2	210,930,431	206	82.7	165,394,276	162	81.8
43235	459,500	532,060	1.2	81.0	203,252,900	442	83.6	156,255,256	340	82.5
E0410	86,780	2,086,580	24.0	91.3	187,769,075	2,164	92.0	150,717,853	1,737	91.6
90240	964,380	7,426,160	7.7	73.6	227,485,142	236	76.8	149,701,595	155	76.0
45385	212,820	227,700	1.1	77.7	177,909,857	836	79.6	147,670,301	694	79.1
80019	6,163,160	12,104,980	2.0	97.5	226,158,659	37	97.3	145,810,204	24	97.4
A2000	931,160	8,326,880	8.9	45.0	176,174,254	189	48.5	138,768,801	149	46.9
92012	2,560,060	4,450,540	1.7	64.2	168,503,859	66	67.4	137,819,907	54	67.0

See footnote at end of table.

Table 74—Continued

Persons using Part B physician and supplier services under Medicare, services, and charges in descending order, by the 200 most frequently reported Health Care Financing Administration Common Procedures Coding System (HCPCS) codes: Calendar year 1988

Leading HCPCS code	Number of persons	Services			Submitted charges			Allowed charges		
		Number	Mean	Percent assigned	Amount	Mean	Percent assigned	Amount	Mean	Percent assigned
99173	499,200	2,534,340	5.1	82.9	$163,370,140	$327	84.9	$124,636,718	$250	83.7
27244	97,760	151,200	1.5	70.9	191,784,139	1,962	74.9	124,511,231	1,274	73.3
93309	699,220	803,200	1.1	81.2	162,294,662	232	82.7	123,707,944	177	82.0
76091	2,083,940	2,194,760	1.1	62.0	146,456,941	70	62.6	116,404,019	56	60.4
93549	120,420	124,320	1.0	79.1	149,298,987	1,240	81.9	112,661,438	936	80.4
90215	1,294,460	1,795,720	1.4	70.5	157,559,804	122	73.4	110,196,645	85	71.4
90292	2,157,460	3,071,460	1.4	76.4	163,366,031	76	79.9	109,658,983	51	78.6
66983	244,400	296,920	1.2	68.7	166,674,406	682	77.3	109,439,749	448	74.7
90280	494,140	2,590,720	5.2	83.8	146,649,894	297	86.1	109,216,317	221	85.3
43239	280,980	315,960	1.1	82.3	138,790,833	494	84.6	106,936,738	381	83.5
88304	2,178,080	3,004,040	1.4	75.3	149,992,965	69	76.1	106,559,851	49	75.7
92982	59,600	82,680	1.4	73.6	141,027,180	2,366	77.4	105,642,439	1,773	76.5
44140	85,640	150,980	1.8	68.8	160,146,338	1,870	75.0	104,646,690	1,222	73.8
E0620	122,320	170,920	1.4	77.2	128,111,890	1,047	74.0	104,605,277	855	73.6
35301	46,420	114,200	2.5	68.6	149,544,680	3,222	74.3	104,560,135	2,252	73.7
88305	1,420,840	1,798,300	1.3	79.3	153,240,334	108	80.2	104,233,093	73	80.2
70450	821,060	1,032,740	1.3	80.8	132,468,276	161	82.5	104,039,171	127	81.8
70470	658,700	733,600	1.1	75.6	126,552,868	192	77.1	101,089,590	153	76.2
90844	246,140	1,772,300	7.2	82.8	151,556,085	616	83.8	100,658,984	409	85.1
67228	68,540	120,600	1.8	82.0	122,224,043	1,783	84.6	93,255,863	1,361	84.2
93870	659,780	787,880	1.2	81.0	126,282,430	191	83.7	92,533,851	140	82.7
99160	621,200	1,009,560	1.6	82.0	129,269,435	208	84.1	91,228,531	147	83.1
90015	2,273,420	2,561,760	1.1	54.1	115,837,948	51	57.1	90,264,304	40	55.5
77410	81,040	1,441,500	17.8	83.5	121,453,914	1,499	85.4	89,271,657	1,102	84.5
27236	91,560	131,240	1.4	67.1	136,550,029	1,491	71.9	88,515,325	967	70.2
90515	1,854,760	2,369,300	1.3	87.7	144,868,100	78	88.4	88,510,858	48	87.7
90517	1,331,460	1,652,060	1.2	89.0	148,822,641	112	89.5	88,469,416	66	89.1
A0220	390,500	493,140	1.3	78.7	116,354,335	298	79.2	88,078,235	226	79.5
33511	21,720	46,040	2.1	74.2	120,370,282	5,542	80.4	87,414,609	4,025	81.0
47605	84,000	158,300	1.9	68.0	127,179,071	1,514	73.7	87,196,487	1,038	72.3
A0020	1,511,920	3,214,020	2.1	85.3	122,268,731	81	84.3	87,120,787	58	84.7
93015	517,060	579,540	1.1	65.0	105,697,882	204	68.6	81,111,414	157	67.2
36415	10,202,120	27,027,780	2.6	95.4	143,309,136	14	95.3	80,620,557	8	95.4
90610	995,500	1,161,800	1.2	70.1	108,262,716	109	72.4	80,546,042	81	71.0
Q0019	354,700	382,400	1.1	77.4	94,686,380	267	79.9	79,720,448	225	78.7
74160	497,860	580,620	1.2	78.4	101,775,863	204	79.1	79,615,982	160	78.9
M0945	61,960	582,220	9.4	96.8	143,319,500	2,313	97.3	79,473,650	1,283	96.9

See footnote at end of table.

Table 74—Continued

Persons using Part B physician and supplier services under Medicare, services, and charges in descending order, by the 200 most frequently reported Health Care Financing Administration Common Procedures Coding System (HCPCS) codes: Calendar year 1988

Leading HCPCS code	Number of persons	Services			Submitted charges			Allowed charges		
		Number	Mean	Percent assigned	Amount	Mean	Percent assigned	Amount	Mean	Percent assigned
52000	545,720	703,400	1.3	63.4	$119,121,556	$218	69.5	$78,935,460	$145	66.2
45330	758,780	797,280	1.1	61.3	121,228,440	160	68.6	77,772,970	102	63.6
49505	121,560	222,820	1.8	62.7	119,840,509	986	68.0	77,651,693	639	66.3
99174	278,460	1,295,840	4.7	86.1	103,882,135	373	88.3	77,156,154	277	87.4
65855	65,840	95,260	1.4	75.9	100,698,918	1,529	81.8	76,761,253	1,166	80.9
33514	14,760	33,920	2.3	72.1	103,423,894	7,007	76.8	76,165,728	5,160	76.2
81000	7,856,980	15,517,720	2.0	93.4	139,901,815	18	93.6	74,991,432	10	93.4
92004	1,655,980	1,749,740	1.1	56.4	88,298,393	53	59.5	73,177,872	44	58.4
V2632	190,440	224,960	1.2	93.7	84,499,224	444	94.1	73,009,689	383	93.9
70551	193,680	214,800	1.1	74.3	92,822,769	479	75.8	72,890,242	376	74.5
76700	836,740	936,860	1.1	77.3	100,646,242	120	80.3	72,163,066	86	78.9
45380	143,300	157,020	1.1	80.1	87,884,573	613	81.5	70,328,516	491	80.7
19240	54,960	114,260	2.1	63.3	102,051,899	1,857	69.8	67,595,444	1,230	68.7
77405	87,220	1,330,720	15.3	81.3	87,901,570	1,008	82.8	64,542,136	740	82.2
78306	662,720	753,020	1.1	76.5	84,032,821	127	77.6	63,984,568	97	76.1
W9555	57,060	394,080	6.9	57.2	79,420,477	1,392	63.3	62,664,669	1,098	63.4
E0260	100,000	364,620	3.6	91.8	80,306,445	803	90.6	61,368,670	614	90.6
93503	178,560	212,600	1.2	75.7	78,880,258	442	79.6	59,720,751	334	78.8
E0255	112,700	496,540	4.4	89.0	80,250,741	712	87.5	57,924,901	514	87.8
90360	411,820	2,058,380	5.0	79.8	75,671,668	184	82.2	56,045,121	136	81.5
76629	311,560	355,340	1.1	90.6	90,074,650	289	92.2	55,954,575	180	91.4
85025	3,116,640	4,864,640	1.6	97.3	74,797,760	24	97.2	55,842,482	18	97.5
E0265	73,520	300,200	4.1	92.3	73,248,055	996	90.8	54,933,595	747	91.3
90843	292,440	1,756,140	6.0	76.5	87,574,011	299	78.0	54,824,027	187	79.9
90605	795,200	959,800	1.2	70.1	71,343,519	90	72.1	52,143,170	66	70.5
33207	47,220	58,960	1.2	76.5	70,096,152	1,484	80.7	51,831,805	1,098	79.6
93910	388,520	554,760	1.4	86.9	73,059,074	188	90.2	51,678,657	133	89.5
35081	22,180	42,740	1.9	67.7	74,853,632	3,375	74.5	51,182,108	2,308	74.1
47600	66,000	110,880	1.7	70.1	80,089,136	1,213	75.4	50,969,357	772	73.5
99172	267,220	1,172,560	4.4	75.7	66,598,429	249	78.0	50,302,251	188	76.7
90520	538,440	670,300	1.2	90.3	76,664,750	142	90.9	49,779,913	92	90.3
92235	278,720	385,200	1.4	77.0	67,447,452	242	79.9	49,573,646	178	78.5
76516	416,580	520,460	1.2	78.9	86,100,822	207	81.5	49,453,758	119	78.6
A4900	3,840	39,580	10.3	98.3	54,280,340	14,136	97.9	49,327,126	12,846	98.0
74170	278,140	310,080	1.1	75.1	64,068,524	230	76.7	49,237,466	177	76.2
17000	945,260	1,461,860	1.5	58.6	61,361,678	65	63.7	48,658,454	51	62.4
90010	1,459,860	1,614,500	1.1	47.1	60,772,839	42	49.6	47,955,271	33	48.3

See footnote at end of table.

Table 74—Continued

Persons using Part B physician and supplier services under Medicare, services, and charges in descending order, by the 200 most frequently reported Health Care Financing Administration Common Procedures Coding System (HCPCS) codes: Calendar year 1988

Leading HCPCS code	Number of persons	Services			Submitted charges			Allowed charges		
		Number	Mean	Percent assigned	Amount	Mean	Percent assigned	Amount	Mean	Percent assigned
82947	2,664,020	8,088,840	3.0	93.2	$84,042,650	$32	93.4	$47,355,894	$18	93.0
90642	323,240	1,175,040	3.6	87.5	62,576,374	194	89.4	45,594,667	141	89.2
90350	387,180	1,927,840	5.0	75.1	63,982,554	165	78.4	45,544,910	118	77.7
M0053	70,400	130,560	1.9	90.8	74,456,946	1,058	90.0	45,056,722	640	90.5
E1404	24,960	153,720	6.2	99.5	55,060,963	2,206	99.4	44,809,846	1,795	99.3
88307	462,840	551,560	1.2	80.2	65,165,092	141	79.5	44,675,516	97	79.4
E0435	71,820	480,200	6.7	91.9	60,167,402	838	93.1	44,353,491	618	92.8
76519	374,040	448,720	1.2	77.7	78,575,854	210	81.3	43,234,739	116	77.5
73510	915,960	1,525,920	1.7	71.7	55,741,601	61	71.8	41,860,044	46	70.2
90510	1,320,920	1,637,980	1.2	85.1	70,458,441	53	85.7	41,847,748	32	85.4
84443	1,302,440	1,680,320	1.3	97.1	65,998,279	51	97.0	41,811,323	32	97.1
33405	11,800	25,760	2.2	77.2	59,985,367	5,084	81.3	41,746,230	3,538	80.7
93307	378,580	426,800	1.1	85.4	55,719,918	147	84.8	41,440,686	109	83.8
67210	39,940	54,820	1.4	79.1	55,308,730	1,385	82.6	41,080,441	1,029	81.1
20610	727,420	1,347,600	1.9	63.1	58,296,803	80	69.6	40,820,497	56	67.5
27125	32,800	45,660	1.4	70.0	60,993,461	1,860	76.2	40,053,199	1,221	75.8
72110	833,240	920,260	1.1	71.0	51,547,865	62	69.6	39,454,187	47	68.4
66985	37,800	62,180	1.6	79.9	64,915,735	1,717	84.8	39,317,736	1,040	83.1
83720	1,708,900	2,307,860	1.4	98.1	47,840,111	28	98.1	38,772,521	23	98.2
85022	2,773,500	4,594,180	1.7	95.3	66,752,817	24	94.9	38,593,131	14	95.1
83718	2,521,420	3,382,900	1.3	97.4	53,286,751	21	97.2	37,956,590	15	97.4
47610	33,600	57,400	1.7	69.4	56,905,688	1,694	73.8	37,728,202	1,123	72.8
74270	831,800	876,900	1.1	70.0	55,755,190	67	69.4	37,632,088	45	67.8
58150	33,260	64,240	1.9	65.5	64,598,557	1,942	71.8	37,310,511	1,122	69.7
90017	863,860	919,220	1.1	57.5	48,799,508	56	60.6	37,132,876	43	58.6
B4150	37,060	238,560	6.4	90.3	46,489,685	1,254	88.6	35,786,301	966	89.0
36830	25,240	43,860	1.7	88.1	49,455,721	1,959	91.7	35,706,326	1,415	91.4
72131	212,200	238,060	1.1	74.9	46,513,487	219	75.1	35,608,441	168	74.3
92083	475,420	595,740	1.3	71.5	46,113,020	97	75.3	35,371,312	74	74.9
82643	945,440	1,751,160	1.9	97.1	61,149,439	65	97.0	35,368,107	37	97.1
31622	105,260	130,740	1.2	79.3	51,227,351	487	81.7	35,319,706	336	80.6
19120	108,400	142,040	1.3	68.6	54,661,004	504	73.5	35,133,050	324	71.6
90600	673,060	789,820	1.2	64.7	49,538,419	74	67.1	34,942,470	52	65.7
78461	171,820	208,100	1.2	80.9	44,848,596	261	82.7	34,873,765	203	82.1
93320	417,640	473,620	1.1	82.4	52,765,791	126	83.5	34,401,851	82	82.6
99171	197,160	914,020	4.6	76.2	48,128,479	244	78.2	34,370,692	174	77.1
B4035	30,900	144,180	4.7	88.6	54,661,842	1,769	90.2	34,086,015	1,103	88.8

See footnote at end of table.

Table 74—Continued

Persons using Part B physician and supplier services under Medicare, services, and charges in descending order, by the 200 most frequently reported Health Care Financing Administration Common Procedures Coding System (HCPCS) codes: Calendar year 1988

Leading HCPCS code	Number of persons	Services			Submitted charges			Allowed charges		
		Number	Mean	Percent assigned	Amount	Mean	Percent assigned	Amount	Mean	Percent assigned
11642	139,120	166,380	1.2	68.8	$45,236,283	$325	73.7	$33,916,069	$244	72.5
M0054	45,880	54,260	1.2	85.0	53,998,667	1,177	84.7	33,600,450	732	85.5
71260	208,840	236,040	1.1	77.4	41,260,945	198	77.6	32,771,438	157	77.5
67036	15,980	26,500	1.7	77.7	45,897,087	2,872	83.6	32,757,504	2,050	83.0
35656	18,300	31,720	1.7	76.6	48,981,404	2,677	82.3	32,449,766	1,773	81.4
E1130	167,980	706,520	4.2	86.7	47,495,017	283	78.4	32,209,308	192	80.8
84436	2,709,660	3,362,100	1.2	97.6	47,481,855	18	97.4	32,120,530	12	97.5
66761	32,580	48,380	1.5	81.4	47,539,429	1,459	84.0	32,109,501	986	83.5
V2020	638,540	693,680	1.1	64.5	41,856,617	66	60.7	31,866,886	50	64.3
32480	15,340	30,720	2.0	75.7	46,750,163	3,048	80.3	31,733,649	2,069	79.8
49000	60,420	81,440	1.3	73.5	54,236,523	898	77.7	31,595,101	523	76.4
88309	240,260	284,820	1.2	79.4	46,558,029	194	79.2	31,495,388	131	78.8
72144	71,880	78,800	1.1	75.5	39,444,591	549	77.2	31,303,463	435	75.9
64721	51,960	91,860	1.8	65.1	48,721,280	938	71.7	30,813,171	593	69.4
67107	15,960	28,820	1.8	66.9	43,622,583	2,733	71.6	30,723,003	1,925	71.1
35556	20,660	34,580	1.7	72.1	46,001,173	2,227	78.9	30,347,116	1,469	78.2
76770	382,120	438,460	1.1	80.5	43,166,521	113	82.4	30,224,633	79	80.7
74150	220,700	252,900	1.1	82.4	39,004,975	177	83.3	30,214,625	137	82.9
W9009	150,680	241,200	1.6	94.6	39,277,350	261	94.9	30,106,971	200	94.9
77400	71,520	826,720	11.6	80.8	43,719,920	611	82.2	29,953,848	419	81.4
E0570	118,100	680,500	5.8	92.6	41,597,191	352	91.7	29,923,541	253	91.5
90841	137,500	837,860	6.1	79.9	47,698,436	347	83.6	29,855,560	217	85.2
90450	354,240	1,419,680	4.0	66.0	42,290,109	119	68.9	29,757,506	84	68.8
11750	151,380	217,900	1.4	70.8	40,651,037	269	74.0	29,559,621	195	73.9
M0050	93,940	116,720	1.2	88.4	43,892,348	467	88.3	29,415,450	313	88.3
E0430	120,120	779,580	6.5	92.7	42,393,158	353	92.6	29,341,558	244	91.9
66170	27,540	45,640	1.7	81.8	47,181,076	1,713	87.2	29,326,334	1,065	85.6
R0070	310,200	468,940	1.5	87.6	39,304,585	127	89.7	29,295,999	94	89.4
90988	24,180	545,820	22.6	97.5	48,150,195	1,991	95.1	29,233,469	1,209	94.9
72193	198,180	222,900	1.1	80.1	37,740,462	190	81.8	29,166,401	147	81.3
44145	18,060	28,940	1.6	68.1	41,651,512	2,306	72.3	28,437,752	1,575	71.0
29881	26,760	39,620	1.5	64.6	43,824,432	1,638	71.2	28,404,897	1,061	68.6
90643	207,300	536,640	2.6	88.0	43,837,455	211	90.1	28,343,113	137	89.1
11100	539,120	658,240	1.2	61.5	38,131,268	71	66.3	28,238,268	52	64.8
44120	27,160	43,440	1.6	73.5	45,200,998	1,664	78.6	28,069,106	1,033	77.1
33510	14,100	21,560	1.5	69.2	43,083,836	3,056	75.8	27,976,743	1,984	76.2
93018	352,900	406,460	1.2	81.0	40,193,692	114	82.0	27,744,904	79	81.9

See footnote at end of table.

Table 74—Continued

Persons using Part B physician and supplier services under Medicare, services, and charges in descending order, by the 200 most frequently reported Health Care Financing Administration Common Procedures Coding System (HCPCS) codes: Calendar year 1988

Leading HCPCS code	Number of persons	Services			Submitted charges			Allowed charges		
		Number	Mean	Percent assigned	Amount	Mean	Percent assigned	Amount	Mean	Percent assigned
74240	584,380	643,840	1.1	69.7	$38,685,562	$66	68.9	$27,618,419	$47	67.6
A0223	185,440	236,980	1.3	79.4	36,745,544	198	78.0	27,491,573	148	79.6
27134	10,060	18,540	1.8	68.0	39,185,257	3,895	72.0	27,412,113	2,725	70.5
V2203	487,160	774,080	1.6	63.5	32,163,582	66	62.8	27,391,656	56	63.6
70460	206,480	225,200	1.1	78.7	34,942,544	169	79.8	27,369,180	133	78.9
Y4750	13,060	86,780	6.6	95.9	33,957,395	2,600	96.0	27,364,500	2,095	95.8
90937	19,440	126,740	6.5	91.2	37,831,782	1,946	92.5	27,306,243	1,405	92.0
77430	27,060	139,540	5.2	71.2	37,500,635	1,386	76.7	27,103,619	1,002	75.9
11641	140,560	165,840	1.2	64.5	35,507,514	253	69.1	26,903,923	191	67.7
36489	209,960	272,680	1.3	81.3	44,273,032	211	84.6	26,845,801	128	83.5
A0222	175,780	344,120	2.0	90.7	36,392,733	207	91.8	26,783,176	152	92.0
Q0022	372,360	430,300	1.2	87.8	41,586,754	112	89.1	26,693,881	72	87.9
74280	424,780	442,100	1.0	71.0	39,212,151	92	71.2	26,463,716	62	70.2
E0730	56,720	90,860	1.6	92.1	30,964,053	546	94.9	26,414,967	466	95.0
31625	74,840	87,920	1.2	79.7	38,244,653	511	82.2	26,107,336	349	81.1
90460	286,400	999,160	3.5	73.2	35,569,316	124	75.7	25,533,026	89	75.2
33430	7,360	15,500	2.1	75.7	37,882,821	5,147	80.3	25,300,233	3,438	80.3

SOURCE: Health Care Financing Administration, Bureau of Data Management and Strategy: Data are from the Medicare Decision Support System; data development by the Office of Research and Demonstrations.

Appendix E
Glossary

Actual charge - The amount a physician or supplier bills a patient for a particular medical service or supply.

Aged enrollees - Persons 65 years of age or over are included in this category if they are: entitled to monthly Social Security Administration (SSA) benefits or payments from the Railroad Retirement Board (RRB), uninsured for SSA or RRB benefits but transitionally insured for Medicare, or not included in the above groups but purchase hospital insurance and supplementary medical insurance coverage. Persons 65 years of age or over identified as having end stage renal disease (ESRD) are included.

Allowed charge - An individual charge determination made by a carrier on a covered Part B medical service or supply. In the absence of unusual medical complications or circumstances, the reasonable charge is the lowest of (1) the physician's or supplier's actual charge, (2) the physician's or supplier's customary charge for that service, or (3) the prevailing charge for the physicians or suppliers rendering the service in the same locality.

Assignment - An enrollee in the supplementary medical insurance program may agree with a provider of service to assign benefit rights to the provider. When this assignment method is used, the provider agrees to accept as the total charge for the covered service the amount that is approved by the carrier as the reasonable charge. The provider submits a claim to the carrier and is reimbursed for the reasonable charge, minus 20-percent coinsurance and any unmet deductible. The provider may then charge the enrollee only for the coinsurance and unmet deductible.

Average compound rate of growth - Also called the average annual rate of change, this is a geometric rate of change in which a variable increases or decreases at the same rate each year. For example, an average annual rate of change of 10 percent, starting with a base of 100, would increase to 110 in the first year, 121 in the second year, and so on.

Balance billing - A type of cost-sharing under Medicare whereby a beneficiary is responsible for the difference between the physicians submitted charge and the Medicare allowed charge on unassigned claims.

Beneficiary - Under Medicare, a beneficiary is a Medicare enrollee who used a covered medical service, during a specified period of time (e.g., Calendar year), whether or not the service was reimbursable.

Benefit payments - These payments comprise all withdrawals from the Medicare hospital insurance and supplementary medical insurance trust funds for services rendered to Medicare enrollees. Payments include both reimbursements recorded on bills and payments made independently of the billing system (interim payments, end-of-year adjustments, and certain capitation payments). Benefit payments shown in this report also relfect projected complete Medicare benefit population estimates for a specified period of time (e.g., a calendar year or a fiscal year).

Benefit period - A benefit period begins the first day an enrollee is furnished inpatient hospital or extended care services by a qualified provider, and it ends when the enrollee has not been an inpatient of a hospital or other facility primarily providing skilled nursing or rehabilitation services for 60 consecutive days. There is no limit to the number of benefit periods an enrollee can have. The enrollee must pay the hospital insurance deductible for each new benefit period.

Budget neutral - Program payments may not be greater than, nor less than, the payments that would have been paid under the law previously in effect.

Carrier - A carrier is an organization that has contracted with the Department of Health and Human Services to process claims and perform other services under Medicare's supplementary medical insurance program.

Claim - A request to a carrier or intermediary by a beneficiary or a provider acting on behalf of a beneficiary for payment of benefits under Medicare.

Coinsurance - Coinsurance is the portion of reimbursable hospital and medical expenses, after subtraction of any deductible, that Medicare does not cover. Under hospital insurance, there is no coinsurance for the first 60 days of inpatient hospital care; from the 61st through 90th day of inpatient care, the daily coinsurance amount is equal to one-fourth of the inpatient hospital deductible. For each of the 60 lifetime reserve days used, the daily coinsurance amount is equal to one-half of the inpatient hospital deductible. There is no coinsurance for the first 20 days of skilled nursing facility (SNF) care; from the 21st through 100th day of SNF care, the daily coinsurance amount is equal to one-eighth of the inpatient hospital deductible. Under supplementary medical insurance (SMI), after the

annual deductible has been met, Medicare pays 80 percent of reasonable charges for covered services and supplies; the remaining 20 percent of reasonable charges is the coinsurance payable by the enrollee. However, there is no coinsurance for home health services under SMI.

Covered services - Covered services under the Medicare program are the services and supplies for which Medicare will reimburse. Examples of covered services are given in this glossary under specific headings, such as skilled nursing facility services.

Customary charge - Customary charges are the amounts physicians or suppliers usually bill patients for furnishing particular services or supplies under the Medicare supplementary insurance program.

Deductible - Deductibles are the amounts paid by enrollees for covered services before Medicare makes reimbursements. The hospital insurance deductible applies to each new benefit period, is determined each year by a formula specified by law, and approximates the current cost of a 1-day inpatient hospital stay. The supplementary medical insurance deductible is, by law, the first $75 of covered charges per calendar year, effective January 1, 1982.

Diagnosis-related group (DRG) - This is a system for classifying patients into groups that are clinically coherent and homogenous with respect to resource use. The system contains 477 (for SSH discharges in 1988) mutually exclusive and comprehensive case classification categories called DRGs.

Disabled enrollees - For purposes of Medicare enrollment, individuals under 65 years of age who have been entitled to disability benefits under the Social Security Act or the railroad retirement system for at least 24 months are considered disabled and are entitled to Medicare.

Discharge - A discharge is a formal release from a hospital or skilled nursing facility. Discharges include persons who died during their stay or were transferred to another facility.

End stage renal disease enrollees - Individuals who have chronic kidney disease requiring renal dialysis or a kidney transplant are considered to have end stage renal disease. To qualify for Medicare coverage, such individuals must be fully or currently insured under social security or the railroad retirement system or be the dependent of an insured person. Eligibility for Medicare coverage begins the third month after the month in which a course of renal dialysis begins. coverage may begin sooner if the patient participates in a self-care dialysis training program provided by an approved facility. Also, coverage may begin on admittance to a hospital to receive a kidney transplant or to receive dialysis before the transplant.

Enrollee - See aged enrollees and disabled enrollees. An enrollee is a person who is eligible for coverage and is enrolled in the Medicare program.

Expenditure - Under Medicare, expenditures for covered services represent the Medicare program payment amount plus any beneficiary cost-sharing amount.

Federal hospital insurance trust fund - The Federal hospital insurance trust fund is a trust fund of the Treasury of the United States in which are deposited monies collected from taxes on annual earnings of employees, employers, and self-employed persons covered by social security. Disbursements from the fund are made to help pay for benefit payments and administrative expenses incurred by the hospital insurance program.

Federal supplementary medical insurance trust fund - The Federal supplementary medical insurance (SMI) trust fund is a trust fund of the Treasury of the United States consisting of amounts deposited in or appropriated to the fund as provided by title XVIII of the Social Security Act, including premiums paid by enrollees under SMI and contributions by the Federal Government from general revenues. Disbursements from the fund are made for benefit payments and administrative expenses incurred by the SMI program.

Fiscal year - Fiscal years 1972-76 extended from July 1 through June 30. Beginning with October 1, 1977, fiscal years extend from October 1 through September 30.

General hospital - A general hospital is a hospital maintained primarily for inpatient care of acute illness or injury and for obstetrics.

Home health agency - A home health agency is a public or private organization that provides skilled nursing services and other therapeutic services in the patient's home and that meets certain conditions to ensure the health and safety of the individuals furnished services.

Home health services - Home health services are services and items furnished in patients' homes under the care of physicians. These services are furnished under a plan established and periodically reviewed by a physician. They include part-time or intermittent skilled nursing care; physical, occupational, or speech therapy; medical social services; medical supplies and appliances (other than drugs and biological); home health aide services; and services of interns and residents.

Hospital insurance - Hospital insurance (also known as Medicare Part A) is an insurance program providing basic protection against the costs of hospital and related posthospital services for individuals who are age 65 or over and are eligible for retirement benefits under the social security or railroad retirement systems, for individuals under age 65 who have been entitled for at least 24 months to disability benefits under the social security or railroad retirement system, and for certain other individuals who are medically determined to have end stage renal disease and are covered by the social security or railroad retirement systems.

Inpatient hospital services - Inpatient hospital services are items and services furnished to an inpatient of a hospital by the hospital, including room and board, nursing and related services, diagnostic and therapeutic services, and medical or surgical services.

Intermediary - An intermediary is an organization selected by providers of health care that has an agreement with the Department of Health and Human Services to process institutional claims and perform other functions under Medicare's health insurance program.

Laboratory and radiological services - These services are professional and technical laboratory and radiological services ordered by a licensed practitioner and provided in an office or similar facility (other than a hospital outpatient department or clinic) or by a qualified laboratory.

Lifetime reserve - A Medicare hospital insurance enrollee has a nonrenewable lifetime reserve of 60 days of inpatient hospital care to draw on if the 90 covered days per benefit period are exhausted.

Midpoint enrollment - Enrollment as of July 1 has been chosen as the denominator for utilization rates published in this Medicare data series. The choice was based on the similarity of the July 1 enrollment to a 12-month average enrollment. A comparison of aged HI enrollment by age, race, and sex on July 1, 1983, with an average of 12 monthly enrollment figures in 1983 showed remarkable similarity.

Outpatient hospital services - Outpatient hospital services are services furnished to outpatients by a participating hospital for diagnosis or treatment of an illness or injury.

Outlier threshold - In addition to the basic Medicare prospective payment rates, program payments must be made for discharges deemed to be day outliers or cost outliers. The day outlier threshold is set at the lesser of 18 days or 2.0 standard deviations and the cost outlier threshold at the greater of 2.0 times the prospective payment rate for the DRG or $14,000.

Outpatient services - Outpatient services are medical and other services provided by a hospital or other qualified facility or supplier, such as mental health clinic, rural health clinic, mobile X-ray unit, or freestanding dialysis unit. Such services include outpatient physical therapy services, diagnostic X-ray and laboratory tests, and X-ray and other radiation therapy.

Participating physician or supplier - A physician or supplier who agrees to accept assignment on all Medicare physician/supplier claims under the Medicare SMI program.

Passthrough amounts - The Medicare payment rate for hospitals participating in the prospective payment system does not include passthrough costs, such as capital-related costs, direct medical education costs, and organ procurement costs. Under the prospective payment system, these passthrough costs continue to be reimbursed on a reasonable-cost basis.

Persons served - Under Medicare, a person served is a Medicare enrollee who used a covered medical service, who incurred expenses greater than the deductible amount, and for whom Medicare paid benefits. Persons are counted once for each type of covered service used, but are not double counted in aggregate totals. Thus, a person who receives inpatient hospital services and skilled nursing facility services in a year is counted as receiving both of these services but is counted only once in calculating all persons served under HI. A person receiving the same service two or more times in a year is counted as one person served. For example, persons having two or more hospitalizations during a year are counted as one person served for inpatient hospital services. In a like manner, persons served under both HI and SMI are counted only once in the overall total.

Physician services - Under Medicare, physicians' services are services provided by an individual licensed under State law to practice medicine or osteopathy. Services covered by hospital bills are not included.

Premium - A premium is a monthly fee paid by Medicare enrollees. Hospital insurance (HI) enrollees who are social security or railroad retirement beneficiaries and who qualify for coverage through age or disability are not required to pay premiums. Aged persons who are not eligible for automatic HI enrollment may pay a monthly premium to obtain HI coverage. Supplementary medical insurance enrollees pay a monthly premium that is updated annually to reflect changes in program costs.

Prevailing charge - The prevailing charge is the charge at the 75th percentile in an array of the weighted customary charges made for similar physician/supplier services in the same locality.

This is the upper limit of charges deemed "reasonable" for reimbursement under the Medicare SMI program.

Program payment - The Medicare program payment amount includes only the amount shown in bills received and processed (as a specific cut-off data) by the Medicare program in the Health Care Financing Administration central office files. Not included in program payments are interim payments to institutional providers, payments to institutional providers resulting from adjustments to the end of fiscal year cost reports, certain capitation payments for prepaid group health plans, beneficiary cost-sharing amounts, and administrative costs.

Prospective payment system (PPS) - PPS is a reimbursement system whereby Medicare payment for inpatient operating costs is made at a predetermined specific rate for each discharge rather than on a reasonable-cost basis. Discharges are classified according to a list of diagnosis-related groups. (See Diagnosis-related group.) The prospective payment rate excludes capital-related costs, direct medical education costs, the cost of bad debts for deductibles and coinsurance incurred by beneficiaries, and kidney acquisition costs, which continue to be reimbursed under a reasonable-cost based system.

Railroad retirement system - The railroad retirement system was mandated by the Railroad Retirement Act of 1937 as a retirement system for railroad employees.

Reasonable charge - In processing claims for supplementary medical insurance benefits, carriers use Health Care Financing Administration guidelines to establish the reasonable charge for physician/supplier services rendered. The reasonable charge is the lowest of: the actual charge billed by the physician or supplier, the charge the physician/supplier customarily bills patients for the same service, or the prevailing charge that most physicians or suppliers in that locality bill for the same service. Increases in physicians' prevailing charge levels are recognized by Medicare only to the extent justified by an index reflecting changes in the costs of practice and in general earnings.

Reasonable cost - In processing claims for hospital insurance (HI) benefits, intermediaries use Health Care Financing Administration guidelines to determine the reasonable cost incurred by individual providers in furnishing covered services to enrollees. The reasonable cost is based on the actual cost of providing such services, including direct and indirect costs of providers and excluding any costs that are unnecessary in the efficient delivery of services covered by the HI program.

Reduction amount - The difference between the physician's submitted charge and the Medicare allowed charge.

Short-stay hospital - A short-stay hospital is one in which the average length of stay is less than 30 days. General and special hospitals are included in this category.

Skilled nursing facility - A skilled nursing facility is an institution that has a transfer agreement with one or more participating hospitals, is primarily engaged in providing skilled nursing care and rehabilitative services to inpatients, and meets specific regulatory certification requirements.

Skilled nursing facility services - All services furnished to inpatients of a certified skilled nursing facility that meets standards required by the Secretary of the Department of Health and Human Services and billed by the facility are included.

Supplementary medical insurance (SMI) - Supplementary medical insurance (also known as Medicare Part B) is a voluntary insurance program that provides insurance benefits for physicians' and other medical services to aged and disabled individuals who elect to enroll under the program in accordance with the provisions of title XVIII of the Social Security Act. The program is financed by enrollee premium payments and contributions from funds appropriated by the Federal Government.

Supplier services - The supplementary medical insurance program pays for covered supplier services. As defined in the HCFA Part B Medicare annual data users' manual, these services include those provided by medical supply companies (durable medical equipment), ambulance suppliers, independent laboratories (billing independently), pharmacies, portable X-ray suppliers (billing independently), and voluntary health or charitable agencies.

Geographic classifications

All areas - The United States, Guam, Puerto Rico, Virgin Islands, other outlying areas, and foreign countries are included.

All other areas - American Samoa, Canton Island, Caroline Islands, Guam, Mariana Islands, Marshall Islands, Midway Islands, Virgin Islands, and Wake Islands comprise this category.

Place of residence - The beneficiary's place of residence classification is a mailing address, not necessarily an actual place of residence. Some beneficiaries have their checks mailed to a post office or to a representative payee in a State or county that may differ from their own residence.

SMSA, Metropolitan SEA - See urban and rural metropolitan and nonmetropolitan counties. Only areas in the United States are listed.

Urban and rural metropolitan and nonmetropolitan counties - The division of counties into metropolitan groups is based on the list of standard metropolitan statistical areas (SMSAs) defined by the Office of Management and Budget. Except in New England, each SMSA includes a county that contains a central city of at least 50,000 inhabitants, based on the 1980 census. In addition, contiguous counties are included in the SMSA if they meet certain criteria of economic and social integration with the central city. In New England, an SMSA consists of towns and cities rather than counties. However, the mailing address in the master enrollment record file is coded only for State and county. Therefore, for New England, the SMSA was replaced by the metropolitan State economic area (SEA), which is defined in terms of whole counties. Metropolitan counties are those counties that are included in an SMSA or a metropolitan SEA. These counties are further divided into those with a central city and those without a central city. Nonmetropolitan counties are those that fall into neither an SMSA nor a metropolitan SEA.

Demographic classification

Age - Ages for all persons alive at the end of a year are calculated as of July 1 of that year. For persons dying during the year, ages are calculated as of the first day of the month of death. In tables showing enrollment by month of coverage, ages for all persons alive at the end of a year are calculated as of the reference month shown in the table. In tables showing persons ever enrolled, ages are calculated as the oldest attained in the year.

Race - Categories include white, all other races, and unknown. Race is entered into the master enrollment record file from basic records completed by the beneficiary. A race distribution is shown for an SMSA if at least 10 percent of the hospital insurance beneficiaries are classified as "all other races".

Race unknown - Race unknown, whether or not displayed in a table, is included in the "all persons" or equivalent totals. On July 1, 1983, the number of aged HI beneficiaries without a race designation was about 800,000. Race was not known for 57,000 disabled persons (primarily RRB beneficiaries). The relatively high proportion of RRB beneficiaries without a race designation results from incomplete data exchange procedures.

Sex - Sex as recorded in the master enrollment record file.

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